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EDWIN FRANCIS GAY
LL.D. 1918
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November 1, 1919

THE

Modern Husbandman,

OR, THE

PRACTICE of FARMING.

VOL. IV.

CONTAINING,

The Months of *October*, *November*, and *December*.

By WILLIAM ELLIS,

A Farmer, of *Little Gaddesden*, near *Hempstead*, in *Hertfordshire*.

LONDON:

Printed for, and Sold by T. OSBORNE, in *Gray's-Inn*, and M. COOPER, at the *Globe*, in *Pater-Noster Row*.

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THE

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THE

MODERN HUSBANDMAN,

For the Month of *October.*

This Month is the chiefeſt of all others in the Year for ſowing Wheat-ſeed, both in Vale and Chilturn *Countries. In the Vales they generally begin ſowing about* Michaelmas. *In the* Chilturn *a Fortnight before, and hold it till* Allhollantide, *for the ſeveral Reaſons mentioned in my laſt Monthly Book, where, for Want of Room, I was obliged to defer an Account of the Nature of Wheat, and many other uſeful Matters. And as it is abſolutely neceſſary, for every Sower of this delicate Grain, to know which Sort of it ſuits his particular Soil beſt, I ſhall proceed as follows,* viz.

CHAP. I.

The Character of Wheats.

RED *Lammas.* As Wheat is the King of Grain, ſo this Sort has been deemed, hitherto, *The King of Wheats*, for having deſervedly been under the Reputation of producing the whiteſt and fineſt of Flour, as is well known in particular to the *Londoners*, who call it, *The* Hertfordſhire *White*; not that the beſt *Lammas*-wheat grows in this County, but becauſe of the vaſt Quantities of

this largeſt-bodied Sort, that grow in *Northamptonſhire*, *Bedfordſhire*, and *Buckinghamſhire*, and ſome other Northern Counties, which are weekly brought up and ſold at St. *Alban*'s, *Hempſtead*, and ſome other few Markets in theſe Parts, where the greateſt Number of Water-mills are ſituated, for grinding Corn, in a leſſer Compaſs of Ground than any where elſe in *England*. This by many is called *Fire-wheat*, becauſe it has a red Straw, a red Ear, and a red Kernel; and it makes the whiteſt of Flour, ſome are of Opinion, becauſe it has a thicker, more guttery, and tougher Skin than the pirky and white Sorts of Wheat, cuts into larger Flakes of Bran than them, and thus yields rather leſs, but whiter Flour, and more Bran; however, this is certain, that red *Lammas* has not only a whiter Flour than theſe, but a much ſofter, and finer, and often a bigger Body; which makes it the moſt agreeable Sort for the greateſt Quality, and therefore is the fitteſt Wheat to ſow on the beſt Land, on Account of its fetching the beſt Price at Market. This Sort of Wheat is likewiſe in great Eſteem with the *Middleſex* Farmer, for its ſtiff-jointed, high-coloured, long Straw, that they ſell in great Quantities to the *Londoners*, for littering their Horſes with it, ſometimes at eight Pence a Truſs in ſcarce Times, that weighs but thirty-five Pounds, which enables them to pay the greateſt Part of their Rent with this one Commodity. It affects to grow in the richeſt Vale-lands, conſiſting of Loams, or black, or blue Clays, where I have ſeen it grow to near five Feet in Height; yet it is by many ſown in *Chilturn* dry Loams, and even in ſome Gravels, that have been before dreſſed or manured extraordinary well. In ſhort, this Wheat was, till very lately, the only Sort ſown in Vales, and is that noble Sort, whoſe Kernels are ſomewhat longer than pirky Wheat, and near as big as Cherry-

Cherry-ſtones, when it is ſown as true Seed in a right Soil; then it will out-weigh the Pirks or white Wheat. But, when the Pirks are in Perfection, and the *Lammas* not, the firſt will outweigh the laſt; and, for theſe Benefits, great Quantities of its Seed are bought and carried in Waggons into the Northern Countries, becauſe about me, and *Dunſtable*, it is ſowed in chalky Ground, partly for the Purpoſe of ſelling the Seed to be ſown in heavy Loams, or ſtiff Clay-lands in them Counties; chiefly for the Sake of its Change of Soil, and becauſe we get the ſame firſt out of the Hands of thoſe Farmers who make it their Buſineſs, in ſeveral Parts of *Buckinghamſhire*, to lay down Ground every Year, purely to improve this Grain for its Seed; for here it will come off in a large Body, thoroughly clean and free from the Seeds of all Weeds. But this Wheat has a long lank Ear, that expoſes it more than all others to the Spoil of Blights and Strokes; for which Reaſon a right Manager will ſow this Wheat the firſt of all others, that it may get into an early hard Ear in the blightening Honey-dew Seaſons of *June* and *July*. Therefore ſow this Wheat in *September*, or the Beginning of this Month at fartheſt. And it is on this very Account, that many Farmers of late have acted more judiciouſly than formerly; for, in order to avoid this fatal Misfortune, ſome have ſown it early, with a Mixture of Pirks or white Wheat, whoſe Ears, growing in a thick, bunchy Shape, prove a Sort of Skreen, or Shelter, to keep off and break the Honey-dew and other blightening Cauſes from the red *Lammas*, in a great Degree. Red *Lammas*-wheat, when thorough dry, will weigh ſix Buſhels Weight; I mean, five Buſhels in Meaſure will weigh ſix Buſhels in Weight, yet will not yield quite ſo much Flour as the ſame Quantity of pirky Wheat will.

Red *Lammas*-wheat grows about ſix or twelve Inches higher than pirky Wheat; and, as it ſhades too much, it is not ſo proper to ſow with Pirks, as ſome think, though others think otherways.

Pirky Wheat. This Wheat has a white Straw, a white Ear, and a red or yellowiſh Kernel, more round than *Lammas*, and has more of late than ever got into Reputation for its profitable Qualities; particularly for that one of growing in *Chilturn*, gravelly, and chalky Soils, where it will flouriſh and yield excellent Crops, when the red *Lammas* will in ſome Meaſure fail, becauſe this Sort of Wheat will grow in a poorer Soil than that, and yet return as many Buſhels as *Lammas* will in rich Loams, or Clay, provided ſuch Gravels, Chalks, and light Loams are well ſowed and dreſſed with a ſufficient Quantity of Manure. Its bunchy Ear is not ſo ſubject to be blighted as the red *Lammas*, becauſe its Corns grow cloſe in a ſhorter Ear. The Kernels of pirky Wheat have rather a thinner Skin than that, and, if of the right Sort, will yield Abundance of fine Flour; and the more, when they are full dry, for then they will crumble under the Stones into much Meal and little Bran; and as the very fineſt and ſhorteſt Bran cannot be eaſily ſeparated from its Flour, it thus becomes coarſer, than that made from *Lammas*, but this is compenſated by the Quantity of Stuff it makes. For this Reaſon, when pirky Wheat is got into the Barn dry, and has a good Body and Colour, it will fetch at Market, near, if not altogether as much as *Lammas*. It was on theſe valuable Accounts, that ſome attempted, about the Year 1730, to ſow it in their half Acre Ridge-lands in the Vale of *Aylesbury*, and it ſucceeded ſo well in their blue Clays, and blackiſh Earths, that many now ſow no other, where formerly they made Uſe of only the red *Lammas* Sort; for they

have

have found that pirky Wheat now yields more than that, is hardier, will grow in a coarſer Tilth, in a poorer Soil, and with leſs Dreſſing than the *Lammas* can. And for theſe Conſiderations it would be certainly preferred by many of the *Middleſex* Farmers, was it not that the Straw of the red *Lammas*, as I before remarked, brings them in a great deal of Money from the *London* Market; for it is this Sort of Wheat that ſo well reſiſts Honey-dews and other Blights, as tempts many to ſow it among red and yellow *Lammas*. And as it is a very hardy Sort, it is for the moſt Part ſown on Lays after artificial Graſs on only one Plowing, where, if but only harrowed in, it often yields excellent Crops. The ſame on a Barley-ſtubble, or a Pea or Bean-ſtubble, and alſo after Turneps are eaten off, which we in the *Chilturn* Country do every Year, even ſometimes in *February*, or the Beginning of *March*; and, if the Seaſon comes favourable, ſuch a plentiful Crop may be had, as, perhaps, will yield more than ſome Tilth-crops of *Lammas*, as I have known it ſeveral Times to do. In Chalks, Gravels, and light Loams, the Breed of Poppy, or red Weed, in ſome Years, gets ſo predominant, that it ruins Crops of Wheat; but, as this is chiefly bred by too fine a Tilth and too early Sowing, many forbear ſowing Pirks till about the Middle or latter End of this Month. Now, if red *Lammas* is ſown late, it is apt to be ſtruck and blighted; it is not therefore this Sort that is to to be ſown at this Time, but the pirky Wheat comes more and more into Uſe, and particularly for its ſuffering the lateſt Sowing of all others; and by this Means it is, that the Growth of the Poppy and many other Weeds are prevented damaging Wheat-crops. This pirky Wheat, when it enjoys a right Seaſon at Harveſt, will look of a beautiful pale Red, and then ſo nearly reſemble the

the red *Lammas* in its Body and Colour, that many Wheat-buyers take one for the other; and, if the Seed was of the right Sort and grew in a good Soil, it will weigh near, if not quite, as heavy as that. There are ſeveral Sorts of pirky Wheat, but it is difficult to get the true. The right is called, *Aylesbury Pirk*, that, to anſwer this Character, is brought to *Aylesbury* Market, and there ſold ſome Time before, and in Sowing-time. Now the Improvement of this Wheat is brought to paſs thus: There are ſeveral *Chilturn* Farmers near me, who make it their Buſineſs to deal every Year with theſe Vale-men, who, as I ſaid, ſow this and other Wheat-ſeed in new broken up Sward-ground, that it may come off large-bodied, and clear of the Seeds of Weeds. This pirky Wheat they ſow again in their chalky, gravelly, or dry Loams, on Purpoſe to ſell as the propereſt Sort to ſow in ſtiff or wet Loams and Clays; and then it will receive the higheſt Improvement that can be given it, as is yearly experienced by many of thoſe nice Farmers, who, by this Means, ſell a Sack of this Wheat for two or three Shillings more than others, who are ſo indolent, as ſeldom, or never, to change their Seed, and make Uſe of this right Sort. This pirky Wheat has but a ſingle Chaff, ſo that, when it is ripe, the Kernel may be almoſt ſeen through it, for then it is ready to ſtart out of it. Five Buſhels of pirky Wheat ſeldom weigh more than five Buſhels and a Half in Weight, or three Pecks at moſt; yet, if the ſame Meaſure of the red *Lammas* is ground, the Flour of the Pirks will weigh more than the Flour of the red *Lammas*, for the foregoing Reaſons. The Flour of Pirks is apt to cauſe the Bread that is made of it alone to crack; but this is prevented by a Mixture with the *Lammas*. Pirky Wheat has four or five Sets

of

of Kernels, when the *Lammas* has but two or three. It alſo has this good Quality, not to draw the Ground ſo much as the *Lammas* Sorts, becauſe the Straw of the *Lammas* is taller and bigger than that of Pirks. When pirky Wheat is ſown in gravelly Ground, it generally acquires ſuch a Colour, that it often deceives the Buyer for *Lammas*, and is accounted the thinneſt-ſkinned Wheat of all others. The red Pirks are beſt, the Yellow are rather thicker-ſkinned, and hardly to be known from yellow *Lammas*, as the red Sort is from red *Lammas*, and the white Pirk from the white *Lammas* Wheat. In Gravels and lean Loams, the pirky Wheat and *Lammas* grow much of an equal Talneſs, when mixed.

Yellow Lammas. This Wheat has a white Straw and a red Ear. Its Kernel is of a yellowiſh red Colour, rounder, ſhorter, and not ſo guttery as the red *Lammas*; nor is the Ear of the Yellow ſo long by an Inch, as that of the Red, is nearer of the pirky Nature, has a Flour near as white and as fine as that of the red *Lammas*, and whiter than that of Pirks and white Wheat; its Skin is a little thicker than that of the Red, and thus it runs ſomething more into Bran. The Flour-men do not care to buy this yellow Wheat in Summer, by Reaſon its thick Skin is then ſo dry, as makes it apt to grind into a fine Bran, that mixes ſo much with the Flour, as to make it coarſe. But in Winter they readily purchaſe it, for then its Skin quits its Flour with Eaſe. This Wheat will grow on Chalks, Gravels, Clays, and other poor Land, much better than red *Lammas*, but degenerates ſooner than moſt other Wheats; for you may in a few Years ſow it too long in the ſame Soil, till it dwindles to ſo ſmall a Kernel, as not to be worth ſowing. Therefore, it is now very common to ſow it in a Mixture with Pirks, becauſe it is a much ſurer Crop this Way

Way than when ſown alone; perhaps, Variety beſt agrees with the Earth, but it is more true, that the Mode or Make of one Ear is a Security againſt blighting the other; and, as I take it, the Pirks are moſt ſerviceable on this Account, for, I am ſure, ſeveral Farmers in *Pitſtone* Pariſh, on the Edge of *Ayleſbury* Vale, think thus of it, elſe they would not ſow it every Year, mixed in their gravelly and chalky Loams; where, if they are ploughed fine, and dreſſed well, theſe Grains will flouriſh to great Profit, becauſe theſe two Wheats will ſell and grind well together: For, the yellow *Lammas* being toughiſh, and the Pirks ſhort, the firſt will keep the Latter from making too ſmall a Bran, and running too much into Flour. A great *Chilturn* Farmer, whoſe incloſed Fields had ſeveral Soils in them, obſerved, as often as he could, to ſow his Loams with red *Lammas*, his Gravel with Pirks, and his loamy Chalks, with white or yellow *Lammas*, for he is certainly moſt in the Right, that ſows a Seed that is moſt agreeable to the Soil it is to grow in; in which, this, as well as the red *Lammas*, requires an early Sowing, as I have before hinted, and a frequent Change. Yellow *Lammas* yields a Peck or two of Flour leſs, in five Buſhels, than red *Lammas*: Yet I know more than one Farmer that ſows yellow *Lammas*, in their ſtiff, clayey Loams in the *Chilturn*, and thinks it the very beſt Sort, for its thin Skin, cloſe Ear, and good Yield; and beſt agrees to be ſown with Pirks, becauſe it grows about four Inches higher, and ſhelters that the better from Blights. Others differ in their Opinion and think otherways.

White Wheat. This white Wheat has a white Straw, and a white bunchy Ear; it kernels as big as Pirks, grows cloſer together than the red or yellow *Lammas*, and thus is better ſecured from Strokes

Strokes and Blights than they are. Now this Corn is moſtly defended againſt theſe Incidents, by Means of its rough Chaffs; for the right Sort of white Wheat has two or three that encompaſs each Kernel, which alſo preſerve it in a great Meaſure from the Damage of Flies, and other Inſects, which are apt to ſpoil Wheat, while it is growing in the Ear. When this excellent Wheat is near ripe, its true Sort may be known by its Aſpect, for then it will appear, as if it were hoary all over its Ear. About us, it is more and more ſown, as being a Sort that thrives well in our incloſed, poor, gravelly, chalky, and light loamy Soils; and, by many, this, or any other of the white Wheats, is much ſown in a Mixture with red, or yellow *Lammas*, becauſe this Wheat will not help to keep off Blights from that, but is a moſt proper Sort to ſell and grind with the red or yellow *Lammas*, by Reaſon one is of a ſhort, brittle Nature, and the other tough; which prevents the White from running too much into ſmall Bran, as it is apt to do, if ground alone, and then its Flour will be the coarſer. This Wheat weighs rather lighter, than either the red or yellow *Lammas* or Pirks, yet makes more Stuff or Flour than they do, becauſe its very ſmall Bran, remaining among it, is not eaſily perceived, for, as its Coat, or Skin, is of a light Colour, it gives the Meal and Bread a pleaſing yellowiſh Caſt. On this Account, white Wheat ſtands the Baker's Friend, becauſe its white Colour will admit of a Mixture of ſo much ſmall Bran with its Flour, that leſs Flour will ſerve in making a Loaf, and yet the Cuſtomer be at the ſame Time contented; for, if he has not a penetrating Judgment, he cannot find out the *Legerdemain* Part of this Matter. There is a ſmooth-eared Sort of white Wheat, that, with us, is not reckoned ſo valuable, as

this rough-eared Sort, and are both diſtinguiſhed by the Names of *White Pirks* and *White* Lammas. But I muſt own, I never ſaw ſuch large Kernels of white Wheat as I did in half Tubs, as they ſtood in *Taunton*-Market, in the Year 1737, where the Farmer ſells this, and other Sorts, by the Peck and Half-peck to the Weavers and Country poor People, who here call it *Holland Wheat*; and, in ſome Markets, it ſells for more Money than any other. But, at *Hempſtead*, it ſells for one or two Shillings leſs in a Sack than the red *Lammas*, or Pirks, becauſe here they chiefly endeavour after getting the fineſt Flour for ſupplying the *London* Baker and Paſtry-cook. The Flour of white Wheat is of ſo ſhort a Nature, that the Workman can hardly make a Loaf of it that will ſtand without cracking; and therefore it is generally mixed with the Flour of the *Lammas* Sort, which improves each other, ſo as to make excellent Bread. White Wheat will grow well both in Vale, ſwampy, ſtiff Soils, and in *Chilturn* dry Grounds.

Duck-bill or Dugdale *Wheat.* In *Eſſex* they call this *Grey-poll Rivet*; in *Huntingtonſhire*, *Dunover Wheat*; in the Weſt-country, *Grey-poll* and *Blue-poll Wheat*; in *Hertfordſhire*, *Duck-bill*, or Dugdale *Wheat.* In *Berkſhire*, there is a white-cone Wheat, whoſe Straw is like a Ruſh, full of Pith, and not hollow, like the *Lammas* Sort; however, theſe are all bearded Wheats. The common Duck-bill Wheat has a darkiſh, brown, crooked, guttery Kernel, rather bigger than any other Wheat; but its Chaff is better thrown away to make Dung, than to give to Cattle, becauſe, by the Sharpneſs of its Sides, it pricks and cankers the Horſes Mouths. A certain Farmer ſuffered above ten Pounds Damage on this Account in one Year; for this Diſtemper reduced his Horſes ſo low, before it was cured, that they could not work for a conſiderable Time.

Time. It is ſown both in Vale and *Chilturn* Grounds, in wet and dry Loams, that are made rich with Manures, for a very poor Soil will not agree with this Wheat, as it is a great Drawer of the Earth. It ſhould be ſown a Fortnight before *Michaelmas*, at lateſt, becauſe it is always late ripe, and then in a ſtiff Soil; for this bulky Wheat is very apt to fall by the Wind and Rain; therefore no light Sand ſuits it. In the Vale they ſow it Broad-caſt on their Ridge half Acre Lands, and plow it in. In the *Chilturn* they ſow it in Broad-lands, while they lie rough, and harrow it in. In two or three Bout-lands they ſprain the Seed, and plow it in, but do not harrow afterwards. If it is ſown in four Bout-lands, they plow in Half, and harrow Half in. If this Corn is ſown in Broad-lands, the beſt Way is to fold on it to make it ſtand faſt; but this muſt not be done in Stitch-work, for then the Sheep would tread the Seed into the Thoroughs, and ſpoil the Crop. This Seed, when ſown in a fine, well dreſſed Tilth-ground, produces the moſt of all others. One Ear has been ſaid to have had above an hundred Grains in it, and on an Acre above fifty Buſhels of Wheat have grown; but, as its Flour is of the coarſeſt and heavieſt Sort, it is ſold for two or three Shillings leſs in a Sack than the *Lammas*, Pirks, or white Wheat. Its Kernels are of a brittle Nature, and therefore grind well with the *Lammas* Sort. One Buſhel of *Dugdale* and three of *Lammas* make very good Bread; but, in many Places in the Weſt-country, the Bakers in general allow more of this Flour than the other, which cauſes their common Loaves to be brown, cloſe, and heavy, as I obſerved (and that moſt of all) in *Somerſetſhire*, where, I believe, they ſow more of the Grey and Blue-poll Wheat, than in any other Part of *England*. In *Hertfordſhire*, *Bedfordſhire*, *Bucks*, and in moſt of the Southern and Eaſtern

tern Countries, little of this Wheat is ſown; and then it is chiefly for the Farmer's own Uſe, becauſe a great deal of this will grow in a little rich Ground, which enables them to make the moſt at Market of their better Sort. This Wheat is fit to reap, when its Beards are ready to drop off, are hard to thraſh out, and yield a great deal of Chaff. The *Lammas*, Pirks, White, or *Dugdale* Wheats are very rarely ground alone for the Baker's Uſe, becauſe the firſt grinds too tough and flaky, and the reſt run too much into a branny coarſe Flour; therefore they ſow grey or blue-poll Wheat and *Lammas* together, and grind two of a contrary Sort at once, that the Flour may anſwer their Purpoſe the better. They never brine nor lime the Seed of bearded Wheat, for it is never known to ſmut. Two Buſhels of Seed is the common Allowance for one Acre of Ground, as it is a great Brancher. It will grow in rough four Tilths, the beſt of any Wheat, therefore ſome ſow it on only one Plowing up of a Lay and harrow it in; but it muſt be carefully done in ſuch Lays by a ſkilful Workman, leſt, as it is a large-bodied Grain, it be too much expoſed to the Beaks of Fowls; and ſo careleſs are many in preparing the Ground by ſeveral Plowings for this Grain, that they venture to ſow it on four Land, without any Manure, and ſometimes come by pretty good Crops. But he that makes a fine Tilth, and manures the Ground well for his Seed, ſtands a much better Chance of a plentiful Return at Harveſt; and the more, for that all the bearded Sorts are freeſt from Blaſts, Blights, and Strokes of any, as being guarded againſt them by its Beards. This Wheat yields a ſharp cutting Meal; but, when finely ſifted, it ſerves to mix with other Flour. One Buſhel of this, mixed with Flour of *Lammas*, the *London* Baker approves of, becauſe it keeps the Bread a Day or two longer

moiſt

moiſt than uſual, and yet its natural Coarſeneſs is not perceived by the Cuſtomer. If it is finely ſifted, it makes the ſweeteſt and ſhorteſt Pancake.

A particular very large-bearded Wheat. The late Mr. *Johnſon*, of *Ivingboe-Arſon*, a very able Yeoman and nice Seedſman, famous for being the chief Oppoſer of incloſing a certain Common, was a moſt hoſpitable Neighbour, and thus became the nobleſt Work of God, an honeſt Man. He was very curious in collecting ſeveral Sorts of Corn for ſowing them in Fields. Among the reſt he got a bearded Wheat that grew in a Set of four Kernels in Rows, or Sides, inſtead of two that the *Dugdale* has. It had a very large Ear and white, its Straw of the ſame Colour and round, but the Kernel brown. This Wheat yielded prodigiouſly, but he was forced to leave off ſowing it, becauſe the Ear was ſo large and heavy, that it fell down before it was fit to reap, for his Ground was rather too light for it; but had he in his Time known the Benefit of ſowing Wheat in Drills, undoubtedly he might have enjoyed its Crops in Perfection.

Double-eared Wheat. It is ſometimes ſown in *Eſſex* in dry Loams. This Wheat, Mr. *Houghton* ſays, in 1679, was taken for a Prodigy, for, about that Time, Books were publiſhed concerning a Perſon, who, in the Time of Scarcity, ſold his Corn to the Poor for a Shilling a Buſhel leſs than his Neighbours, and had, the next Year, a Field of Wheat which had twelve or fourteen Ears upon one Stalk, and that there was another ſuch Crop in *Suffolk*. This is ſomewhat like the Character of Farmer *Rowland*'s Peaſe, who uſed to ſow half an Acre of Ground with Peaſe, partly for the Poor, by giving a Meſs of them to any of the poorer Sort on Aſking; and it was obſervable, that the ſame Piece of Peaſe yielded a greater Quantity at Harveſt, than the ſame Meaſure of Ground did elſewhere in the ſame Farm,

Farm, although a great deal was given away before.

Bleſſings ever wait on virtuous Deeds,
And, tho' a late, a ſure Reward ſucceeds.

Egg-ſhell or Mouſe-dun Wheat. I do not know that any of this grows in *Hertfordſhire*, or any where elſe in *England*, but in one particular County that I have travelled through. Here, they told me, that theſe are ſynonymous Names for this Wheat, which they affirm to be the beſt in *England*, becauſe it makes the fineſt of Flour; and, indeed, I was ſurpriſed to hear afterwards one of the greateſt Bakers in *London* confirm the ſame, who aſſured me, it beat our red *Lammas*, for making a white Bread and Manchet, that the Flour of red *Lammas* could not come up to. I have handled ſome of this Wheat, and muſt own, by its outward Appearance, it did not promiſe all this. But its Inſide was, by all in the Neighbourhood, allowed to anſwer the Character I have given of it. I intend in a little Time to get ſome of its Seed, and ſow it in my own Ground, that I may be capacitated to furniſh Gentlemen with it at any Diſtance.

A farther Account of red Lammas *Wheat.* Red *Lammas* is known to have the talleſt Straw of all others, and therefore is more liable to fall ſooner than Pirks, or white Wheat. Some ſay, five Buſhels of red *Lammas*, or yellow *Lammas* Wheat, is ſufficient to mix with twenty Buſhels of Pirks, or white Wheat, to make it grind into a delicate Flour. There are other Wheats that have been ſown in ſome Parts, as the red-bearded *Kentiſh* Wheat, red *Lammas* with Ailes, Cone-wheat without Ailes, *Aleppo*-wheat, Duck-bill Wheat, Duke-wheat, ſquare Grey without Ailes, *Poland*-wheat, Knot-wheat, and Pendul-wheat.

A far-

A farther Account of white Wheat. The ſmooth-eared Sort of white Wheat has a ſingle Chaff and thin Skin, and, being of a pirky Nature, the Kernel at Harveſt is ready to ſtart out of its Chaff, and very ſubject to be damaged by Rains, which if great and long, are apt to wet the Flour, and make it ſtick to and thicken the Skin, ſo as never thoroughly to part with it. This white Wheat's Flour is ſomewhat coarſer and lighter than the red *Lammas* Sort, and will not take Water ſo well as that. It will certainly grow tawny on red Clays, and therefore, if it muſt be ſown on them, it ſhould be changed every Year and taken from a contrary Soil, as a Gravel, Chalk, or dry Loam, but not a Sand. All this Month, and even till *February* or *March*, you may ſow any of the Pirks or white Wheats.

CHAP. II.

The Benefit of changing Seed.

Several Caſes proving the Benefit of changing Seed. It is yearly experimentally proved by many curious Farmers, that the Change of Seed gives a great Improvement to a Crop of Grain, and eſpecially to Wheat; which, being the chief Corn, that meets with the moſt certain Sale of all others, and on which, as I ſaid, two Years Rent depends, calls for the beſt Management that can be given it.—I knew a great Farmer ſo careful in this Matter, that, where he ſowed his red *Lammas*-wheat one Seaſon, he ſowed a yellow *Lammas* the next Seaſon; and ſo nice was this Man, that he carried on the like Piece of Œconomy to the third Seaſon, or ninth Year, by ſowing white Wheat on the ſame Ground; for

for it was his Notion, and what he has truly experienced, that where even Peaſe were ſown twice in the ſame Field, though a Fallow and a Wheat-crop came between, the latter would prove much the worſe Crop for it.—Another of my Acquaintance, who rents a large Farm between *Hempſtead* and St. *Albans*, ſows five Sorts of Wheat in his incloſed Fields, as, the red and yellow *Lammas*, Pirks, *Dugdale*, and white Wheat, and aſſigns this Reaſon for it: That, if one Sort miſſed, he had the greater Chance for another to hit, and thereby became the better enabled to change his Seed, and adapt a proper Sort to a proper Soil. From whence I obſerve that Seeds of Vegetables, like Animals, affect to be nouriſhed by Variety of Food.—This Knowledge induced a Gentleman, who lived near *Acton*, in *Middleſex*, to commiſſion me to buy him forty Buſhels of the right Sort of pirky Wheat, that grew laſt on a chalky Soil near me, to ſow it in his low, wettiſh, ſtiff, loamy, clayey Land; and he not only had a moſt plentiful Return, but ſuch a bodied Wheat as beat all others in *Uxbridge*-market, where he always ſold his Grain—Near *Amerſham* in *Buckinghamſhire*, a Farmer in the Spring, 1741, having ſowed ſome of his own Bean-ſeed in one Part of his common Field, that he had before ſowed with the ſame ſeveral Years, at laſt was perſuaded by a Friend to buy ſome Horſe-beans at Market for Change-Sake, and ſow in the other Part of the ſame Field, and the laſt ſown proved by far the ſuperior Crop. The Rath-ripe Barley, if ſown more than two Years, with us, will degenerate into our common Barley, notwithſtanding our ſowing it in warm dry Soils, as the Gravels and Chalks are; for this, at firſt, comes from off a ſandy Loam, about *Fulham*, *Hammerſmith*, and *Chelſea*.—If this Year we ſow that Barley-ſeed which came off a Chalk, or Gravel, on our red Clays, or wet ſtiff Loams, the Kernels will be of a reddiſh Colour and thick-ſkinned. On the

the Contrary, ſow the ſame Seed in their former Soils, and they will become white-bodied and thin ſkinned, which plainly ſhews, that it is not ſo much the Change of Climate that occaſions ſuch Alteration, as the Soil.— For a further Proof of this, the *Ayleſbury* Vale Farmer (whom I take to be one of the moſt obſtinate bigotted Sort) has at laſt been prevailed on about twelve Years ſince, to ſow Barley now and then, inſtead of Wheat, on his ridge Lands by Way of Change, and, ſince, has found ſo much Advantage by it, that the Wheat, Barley, and Bean Crops are all greatly improved by ſuch a Change.— The *Acton*, *Edgware*, and *Uxbridge* Farmers are alſo, for the moſt Part, under the Cuſtom of ſowing only Wheat and Horſe-beans: But, if they would ſow Barley between, according to my Steeping-Receipt, they would certainly find their Account in it, for more Reaſons than one.— If white Wheat is not changed from one Soil to another, it will degenerate, and grow into a ſteely Corn, of an ugly dark Colour, little better than *Dugdale* Wheat— A great Farmer, near *Beech-Wood Park*, by *Market Street*, uſed to ſow a hilly Field with Wheat, as far as the hilly Part went, becauſe it was a ſtiff clayey Soil; but, the bottom Part being a gravelly ſtony Piece of Land, he always in the Seaſon ſowed it with Barley for many Years, till, at laſt, he was perſuaded to ſow all of it with Wheat, and there grew a moſt admired, ſtrong, reedy Straw and the beſt of Wheat, which was imputed chiefly to the Change of Seed.— The yellow *Lammas*-wheat in particular, in the whitiſh Loams about *Ivinghoe-Arſon*, has been obſerved to decline, if you ſow the ſame Seed in only two ſucceſſive Seaſons, on the Ground it was ſown on before; For it is their received Opinion here, that they may ſow this Sort (as they term it) till they *loſe* it; that is, till it de-

generates into a moſt poor thin Kernel.— Another great Farmer that I was acquainted with, uſed to keep that Wheat two Years that he ſowed for Seed; and, as it grew on hilly chalky Loams, the Vale Waggoners would buy and carry it down to be ſown in their bluiſh Clays, and black moiſt Loams, for the *Lammas*, or Pirks, coming off ſuch dry Loams, proved an excellent Change; and, by Means of its Age, the ſmall underline Kernels would be hindered growing, for in that Time, they had loſt moſt of their radical Moiſture and Property, and accordingly they ſuppoſe the reſt of the larger Kernels will never grow into Smut.— Another Inſtance I bring, for proving the great Benefit of changing Seed every Year, is this: I know a curious Gardener, who ſows his broad Beans in Drills, made by the Foot-plough, and covers them by Hand-houghs. His Seed he carefully ſaves, and every Year carries it twenty-two Miles to *London*, where he ſells it at the Seed-ſhop, and, as his Beans come off a gravelly clayiſh Loam, he gives Money to Boot (if his is not ſo good) for *Windſor* Beans that come off a dryer Soil.— But Mr. *Tull* lays ſuch Streſs on Houghing of Corn, that he writes there is no Occaſion for changing of Seed if ſo managed. His Words are theſe:— That when any Sort of Vegetable, by the due Degrees of Heat and Moiſture it requires, is agreeable to a Soil, it may, by the new Horſe-houghing Huſbandry, be continued, without ever changing the Species. I ſhall in the following Account endeavour to ſhew, how nearly we may obtain this great and profitable End of keeping Seed from degenerating.

CHAP.

CHAP. III.

To prevent the Degenerating of Seed, in a great Degree.

HOW Seed is prevented from degenerating. A Farmer at *Hudnall*, near me, who rents about a Hundred Pounds a Year, is ſo happy as to enjoy Diverſity of Soils in the ſame. One Field has a Clay Bottom, another a Loam, another a Gravel, and another a Chalk. Theſe give him an Opportunity every Year to change his Wheat-ſeed. Now this Man ſows only two Sorts, the red *Lammas*, and the Pirks; if he ſows the *Lammas* on his Clay this Year, next he ſows the ſame Seed on his Gravel, or Chalk, which though theſe laſt are not truly proper Soils for this Sort of Wheat, yet this proves no Impediment with him, for he dungs or manures the ſame Ground ſo well, that he ſeldom fails of a good Crop. In the ſame Manner he uſes his pirky Wheat, which is a Sort that grows well in any of the four Soils. But this is a Conveniency which few enjoy: Therefore the next Way to ſupply it, is to change Seed with Neighbours who have different Earths; but where ſuch a Correſpondence does not reign, the Market may ſupply it, that affords a Variety at moſt Times. Yet this Farmer did not truſt altogether to the Change of his Soils for keeping his Wheat-ſeed from degenerating; he had alſo a great Dependence on the Preparing his Seed for Sowing, after a different Way from all others, that it might the better anſwer this Purpoſe.

CHAP. IV.

Of ſowing Wheat *in* October *in Vales.*

OF ſowing Wheat *in* Ayleſbury *Vale.*—— In Vales their Ridge Lands commonly vary in their Dimenſions, ſome lying in Ridge half Acre Lands, others in Acre Lands; ſome, but very few, in Lands of an Acre and a Half; but, for the moſt Part, they lie in half Acre Ridge Lands, and differ in their Sowing accordingly, if they are juſt Meaſure. Then a half Acre Land will take up, at the Beginning of this Month, a Buſhel of Wheat-ſeeds; if towards the latter End, then a Buſhel and Half a Peck; if later, more. After their Seed is brined and limed, a Man ſows all Broad-caſt, walking and ſowing from the Ridge to the Thorough, and then again from the Thorough to the Ridge, which makes a Double-caſt. When all is ſown, the Plough-man, with his Foot-plough, plows it in, and thus it lies under Thorough; from whence it comes up at firſt in Rows, but in Time all alike, if it is ſowed true on a fine Tilth. When this is done, the Sowing is finiſhed for that Year, for they never harrow Wheat in here, as they do often in the *Chilturn* Country; and yet, if a kind Seaſon follows, there may the beſt of Wheat grow, as is often ſeen. *See my laſt Month, where I have alſo wrote on this Article with a little Variety.*

Of ſowing Wheat in a Country a hundred Miles to the Northward of London.—— Here their Land generally lies low in a Ridge Shape and never plowed a-croſs, no more than in *Aylesbury* Vale. That which is ſituated neareſt the River *Derwent*, is moſt ſubject to be damaged by Waters, and therefore is ridged the higher up; their Diverſities of Earths are red Clays, Gravels, and Loams,

or

or a Mixture of them. Here their Land lies in open common Fields, and therefore is let at the Rate of ſeven Shillings and ſix Pence an Acre a Year, as it remains in Roods, half Acres, and Acre Lands, and plowed and ſowed only two Years together; for it is their received eſtabliſhed Opinion, that, if they were to plow and ſow ſuch a ſituated Earth three Years together, it would be apt to ruin them, becauſe it would bring it into ſuch a poor, ſour Condition as would render it a barren Soil, in a little Time. And I muſt confeſs, I did not imagine, they were ſuch good Huſbandmen in theſe Parts, till very lately I found them to be ſo, by their wiſe Management in Plowing, Dreſſing, and Sowing their Ground to the Obtaining of good Crops of Corn. When they are to prepare it for ſowing Wheat, they fallow it with their Foot-plough in the Month of *April*, by caſting down their Ridge Lands. In *June*, they fetch five Quarters of Lime from the Kiln, which they call a *Kiln of Lime*, becauſe it is all they burn at once; and, it is the ſtrongeſt Sort of Lime, as being made from Lime-ſtone, and not Chalk. It is this Quantity that they lay in one Heap at a Land's End, and after it has lain in this Poſture three Weeks, or a Month, if the Weather has ſlaked it enough, it is fit for Uſe; otherways, they ſometimes carry Water and throw over it. The next Thing they do, is the Carrying it on the Lands, which they do either with a Cart, Wheel-barrow, or Seed-cot, and out of one of theſe they ſow it over the Rood, half Acre, or Acre Lands; then immediately follows the Plough, and the Lime is plowed in at the ſecond or third Stirree-time, leſt, if the Lime ſhould lie longer above Ground, it may loſe a great Deal of its Strength. At the firſt Stirring-time in *June*, they plow the Land by ridging it up; and ſo again, at the ſecond Time

in

in *July*, they ridge it up with the Foot-plough; and ſometimes they plow it again in *September*, before they ſow, by caſting the Land down; thus they prepare their Ground for ſowing it with Wheat in *October*, by a regular Mixing the Lime with the Earth, at two, or three, or more Plowing-times, which they ſay is abſolutely neceſſary to be done, becauſe, without more than one Operation by the Plough, the Lime cannot be regularly mixed with the Earth, and, if it is not, the Wheat-root cannot have an equal Benefit of the ſame. If they lay Muck, or Dung, on their Wheat Lands (which is not very common) they lay it on at the firſt or ſecond Stirree-times for Plowing it then in; and this, becauſe the Dung is very apt to breed ſmutty Wheat, to which it is very ſubject; for Dung cankers the Wheat-root, and produces very commonly a ſmutty Crop of Wheat, as I have more fully ſhewn in my laſt Monthly Book for *September*. Thus, by an early Plowing in of the Dung, it rots in the Ground, mixes with, mellows the Earth, and cauſes the Ground to lie hollow, which conſequently gives the Corn-roots a deeper Entrance into it. On the Contrary, if Dung was to be plowed in at the laſt Plowing, it would lie lumpiſh in the Ground, and rather hinder the Deſcent of the Wheat-roots, to the Production of ſmall Kernels and other Misfortunes, eſpecially if the Dung is of the long Sort; for Wheat loves a fine, eaſy Root-bed to enable it to ſtand faſt, and withſtand the violent, froſty, wet, and windy Seaſons. The moſt common Wheat they ſow here, is the *German* White, the red *Lammas* or the pirky Wheat; which in kind Seaſons produces very great Crops, for they take a great Deal of Care to keep their Land up in good Heart, by Liming it once in three Years; the next Fallow-time with Muck, or Dung;

Dung; and the third Year after, by folding it. This they punctually obſerve to do alternately, as believing that Change of Dreſſing, as well as Change of Seed, adds a very great Improvement to the Wheat-crop. And, that they may enjoy a Wheat-crop in the higheſt Perfection, they ſend for their Seed to our Parts, and have it bought from off chalky Land to ſow in their ſtiff Soils; which is Part of my Buſineſs to do, as there are great Quantities of this Ground lying near me. Their Way of ſowing their Wheat-ſeed, and plowing it in, is done after the ſame Manner, as I have given an Account it is done in *Ayleſbury* Vale; except that, inſtead of caſting the Ground down at Sowing-time, they ridge it up at Sowing-time in theſe Parts, the better to keep off the Chill of Waters, which they are more than ordinary ſubject to; as their Land, for the moſt Part, lies near Springs and Rivers.

CHAP. V.

The Management of getting in Wheat *in Vale Lands.*

THE whole Proceſs of managing a Wheat-Crop, in Reaping, Binding, Shocking and Carrying it off the Land, according to the lateſt and beſt Practice. In the Northern Parts I have been juſt writing of, they reap their Wheat with the Hacked-Sickle, as is done in *Hertfordſhire*, contrary to what they do in many other Countries, where they prefer the Uſe of the ſmooth-edged Reap-hook. In *Hertfordſhire*, our Women are above handling this Tool, and have been ſo for theſe forty Years paſt, as thinking it too ſlaviſh an Inſtrument for their

their Sex. But in theſe Northern Parts, and in many others in *England*, their Women reap ſometimes in an intire Company of themſelves; but, for the moſt Part, they work among the Harveſt-men, and ſo become a mixed Company; becauſe a Woman can't ſo well bind up a Sheaf as a Man. Thus Women make themſelves Help-mates indeed, and of very great Service to Farmers, by helping them to inn the Fruits of the Earth in due Seaſon: And ſo much does Cuſtom naturaliſe Women to this Labour here, that even the Servant-maids in general, as well as Farmers Wives and Daughters, willingly engage in this Sort of Field-work, and find, by yearly Experience, that nothing adds better to their Health, than this, and other bodily Fatigue, which they are conſtantly brought up in the Exerciſe of, and inured to in the Farming Buſineſs. It is therefore obſervable, that, in this Country, the inferior Sort of Women, for the moſt Part, enjoy a freſh-coloured Countenance, and a ſtrong, large Body, conſtantly eating no other Bread than that made with Flour and the Bran in it, as it comes ground very ſmall from the Mill, or Oat-cakes, inſtead of it; which laſt Sort, a little further North, they eat altogether, as having little or no Wheat growing near them. And it is here, they ſay, in Jeſt, their Women never die; as much as to ſay, they live to exceeding great Ages, by eating no other Sort of Bread than Oat-Cakes, becauſe they are very light of Digeſtion, and clog not the Stomach, like the fine wheaten Bread. Here alſo they are of Opinion, that their Oaten-bread, or Cake, is a great Antidote againſt the Scurvy, and accordingly impute the Enjoyment of their Health to a good old Age, very much to its ſalubrious Qualities. But to return from this Digreſſion, to the Subject in Hand, I have further to add, that, in this Country,

try, they reap and bind as they go, by every Reaper's making his own Straw-band, and tying up the Wheat in Sheaves at the ſame Time, which they immediately ſhock and cap afterwards, as they do in *Kent*, and many other Places. Now ſome I know will wonder, why the Wheat is ſhocked and capped ſo ſoon, in fine, dry Weather. In Anſwer to this, they give this Reaſon for it: That, by Setting up eight Sheaves and Capping with two beſides, ten in all, or ſometimes twelve in all, the whole Shock is better preſerved from the pernicious Power of Miſts and Rains, than thoſe larger Shocks of fifteen Sheaves can be, as the common Mode is in *Hertfordſhire*, which I think a very wrong one. It is alſo in this, our Southern County, that we ſeldom or never cap as we ſhock, nor afterwards, unleſs we foreſee the Danger of Rains; and to prove that we are wrong in *Hertfordſhire*, and they right in the North, let it be conſidered that, after a Shock of fifteen Sheaves is made and ſtands ſome Days without Capping, if it is capped afterwards, ſuch late Capping cannot ſettle and ſit ſo cloſe, as that Capping does, which is put on aſſoon as the Shocks are ſet up. But, for further explaining and illuſtrating the great Benefit of this North-Country Way of Reaping, Binding, and Shocking at the ſame Time, I ſhall make the following Obſervations, *viz.*

Firſt, By ſuch haſty Binding and Shocking, the Wheat is preſerved in a great Degree from the Damage of Damps ariſing from the Ground, where if it lies ſome Days in Reaps, as the *Hertfordſhire* Way is, it generally cauſes the Wheat to loſe its Colour in a great Degree; and, if a wet Seaſon attends it, then it is apt to grow and ſprout to the Farmer's great Diſadvantage, for ſuch ſprouted Kernels ſeldom become thoroughly dry after-

wards, becauſe the Sprouts retain ſuch a Moiſture as will not dry out, unleſs by a great Force of the Sun's Heat, and Wind, which the Wheat is very much deprived of, by lying in incloſed Fields; for here Damps and Wets remain ſo long as to occaſion the Wheat to ſprout in a very little Time, and then it is as difficult to dry it again; I may ſay, much more difficult to dry it again, than when it lies or ſtands in open common Fields. Now here may ariſe an Objection, that, if Wheat is bound up in a dewy Morning aſſoon as reaped, it will in Courſe lodge a great Dampneſs in the Sheaves. To clear this Objection, I have to offer, that though Dews oftentimes fall in great Quantities, and wet much, yet, as they are for the moſt Part only a ſuperficial Moiſture, they are ſoon dried away, by the Heat that ſuch early and cloſe Shocking and Capping will produce. Their Way therefore here is, not to begin Reaping ſo ſoon in a Morning as we do in *Hertfordſhire*, but they hold working later at Night than we do, becauſe the evening Damps are not regarded by them. And, if the Dews are very great in the Morning, they let the Wheat lie ſpread in Bands, till the Sun and Wind in ſome Meaſure dry it up; then, in the Beginning of the Heat of the Day, they bind up, ſhock, and cap, as I ſaid before. But the great Benefit of this excellent Management is further proved by what follows.

Secondly, By ſuch early Binding, Shocking, and Capping, the Degree of Heat is retained and increaſed in the Sheaves, when they are ſo bound, ſhocked, and capped, which certainly is a great Means to preſerve the fine, natural, bright Colour of the Grain, ſo much valued by Wheat-buyers; who well know, that, if Wheat is of ſuch a good Colour, the Flour of it muſt conſequently be very ſweet dry, and white, and, on that Account, fetch more Money

Money in a Market, than that which has loſt theſe Perfections, as that Wheat generally does, that lies ſeveral Days in Reaps on the Ground.

Thirdly, Again, this early Way of reaping, binding, ſhocking, and capping very much prevents the pilfering Gleaner from ſtealing Wheat in the Field; for, while it lies in looſe Heaps on the Ground, it is more than ordinary expoſed to the Rapine of the Field-enemies, who take all Opportunities of robbing the Farmer, but moſt of all when Wheat lies thus expoſed; for, when it lies thus flat on the Ground, and if they come in the Night-time and take a little from each Reap, it is almoſt impoſſible to miſs it. But, when it ſtands in Shocks, the Theft can be much better diſcerned, where they pulled out or cut off Wheat-Ears, for here the Gleaners generally carry a pair of Sciſſars by their Side, and a Bag before them to put in the Ears they cut off from the Straw, in order to lighten their Burthen, for many times they are obliged to go to a conſiderable Diſtance from Home. But ſometimes, and too often, they make an ill Uſe of theſe Sciſſars, by cutting off the Ears of the Bands privately, that hang within-ſide the Shock out of Sight, and alſo from the Inſide of the Sheaves, which cannot preſently be eaſily diſcovered. And ſo prone are Gleaners, in theſe Parts, to abuſe the Farmers in robbing them of their Corn, while it ſtands in Shocks, that many of them are provoked to let the Poor of other Pariſhes come into their Fields to glean, by Way of Revenge: Which they would not do, if their own Poor would but behave themſelves honeſtly. A certain Gentleman that held ſome of his own Land in his Hands, for furniſhing his Houſe with Bread, and other Neceſſaries, had ſeveral Shocks of Wheat intirely carried off his Land, in one Night's Time, by thieving Cleaners, who are ſaid to commit this Piece of Villany

for two Reaſons. One was, becauſe they had a Peak againſt him, on Account of his *Nigardice* as they termed it: The other was, becauſe his Shocks ſtood at a great Diſtance from any Houſe, which gave them an Opportunity to carry off their Booty, with the more Safety. Likewiſe, by this Way of reaping, binding, ſhocking, and capping, Farmers are emboldened to let their Wheat ſtand a Week or two, in fair Weather, in the Field without uncapping, that it may paſs through a ſmall Fermentation; for, in this Northern Part, they never uncap, unleſs great Rains indeed force them to it; and then it is, becauſe the two capping Sheaves are quite wetted thorough, which to dry again, they ſpread on the Ground, and ſo perhaps the wetted Sheaves of the whole Shock. Thus by letting Wheat paſs through a ſmall Fermentation, while it remains cloſely ſhocked in the Field, it will ſweat the leſs in the Mow or Stack, and be delivered from the Dampneſs of Weeds, and the Power of their pernicious Heats: For if Wheat, by any extreme or unnatural Cauſe, ſweats too much in the Mow or Stack, it in Courſe leſſens the Brightneſs of that Colour that ought with our greateſt Care to be preſerved: This is not an inſignificant Item, if duly conſidered, for it is of great Moment to the Farmer, to the Buyer, and and to the Eater's Intereſt, to enjoy Wheat and its Bread, in its beſt Condition; which cannot be done, unleſs a right Management attends the cut down Wheat in the Field, for, according to the common Saying, *A great deal happens ſometimes between the Field and the Barn.*——Wheat, therefore, ought always to ſtand a Week at leaſt to ferment in Shocks, to cure both that and Weeds that may be among it; then there will be no Manner of Danger of mow-burning the Wheat, as it often happens to be, when inned too ſoon, to the Farmer's great Damage. I muſt indeed own,

where

where a very ſmall Company of Men are, who reap their Wheat off four-thoroughed Lands, or what is called *two-bout* Stitches, as many do in the *Chiltern* Country of *Hertfordſhire* and other Places: There, I ſay, Reaping and Binding at the ſame Time cannot be ſo well done as in Vale or other Broad-lands, becauſe, in theſe two-bout Lands, each Man cannot reap more than one at a Time, and therefore cannot perform this without a great deal of Trouble more than ordinary; accordingly it is ſeldom or never done. Nor can ſuch Reaping and Binding at the ſame Time be rightly done in three-bout Lands, becauſe the Reaper muſt go too far to get enough to make a Sheaf before he binds it. But, in four-bout Lands, it may be done by two People working on the ſame Land, at one and the ſame Time, by laying Bands on the Ridge, and binding up directly, or as they come back, which laſt is the quicker and beſt Way; and when, they here ſhock their Wheat-ſheaves, they take them from off the two outermoſt of three Lands, and place the Shock-row upon the middle Land, that the Cart may have full Room to take and carry them off.

The great Importance of curing cut down Wheat in the Field, and the Deficiency of all Authors in not writing on this valuable Subject. The great Importance of curing cut down Wheat in the Field, is eaſily known to the meaneſt Ruſtic, becauſe on the Goodneſs of this golden Grain depends its Sale; and, if the Farmer fails in this, he fails in his principal Prop: For, by one Year's Wheat-crop, he muſt pay two Years Rent, that is, the Year the Wheat grows in, and the third or follaw Year when nothing grows on the fallow Land, becauſe it is under a Preparation for the next Year's Wheat-crop. But admit he has a plentiful Crop of Wheat, and this Wheat proves ſmutty, or abounds with

with Pepper-wheat, or with the Seeds of Weeds, it will in Courſe fetch a ſmall Price at Market. But when to theſe, or any of theſe Misfortunes, another is added of inning a Wheat-crop that has growed or ſprouted in the Field, after being cut down, and ſuch Wheat has loſt its fine bright Colour, and is wet or damp, then it will fetch a very low Price in Compariſon of that which is got in clear of theſe Damages. For, when a Sack of Wheat is ſet down in a Market, the firſt Thing a Wheat-Buyer does, is to thruſt his Hand into it, to feel whether it is damp; for, if it *feels cold*, as their common Phraſe or Expreſſion is, he then generally forbears looking on it, and goes in queſt of dryer Wheat. If he does buy ſuch Wheat, it muſt be ſold at an exceſſive low Price. But in caſe the beſt Wheat ſells at ſo mean a Rate as three Shillings a Buſhel, as it did in *September* 1742, what Chance has ſuch a Farmer to pay his Rent, by the Time his Month or Harveſt-men, his Taxes, his yearly Servants Wages, his Butcher's Bill, and a thouſand other incident Expences are defrayed; and above all, when he has loſt a conſiderable Sum by the bad Huſbanding of his Wheat-crop, in the Manner I have been deſcribing. Surely ſuch a Farmer is in the high Road of breaking? Yet this was partly the Caſe of ſeveral in the Weſtern Part of *Hertfordſhire*, and I am afraid in many Places elſe, in the Year 1742, who ſuffered very much by their miſmanaging their Wheat-crop in the Field, after it was cut down; for they were ſo very eager of inning it, that, after it had lain ſeveral Days on the Ground in open Reaps, they bound it up, without capping the Shock afterwards, and buried it in damp, though it proved the fineſt Harveſt (bleſſed be God for it) that ever I knew.—Of this important Matter of directing in a particular Manner, how Wheat-crops, after Cutting down, ſhould be managed in the Field, all

Authors

Authors that I have read (as I ſaid) have been deficient, even that moſt ingenious practical and valuable Author the late Mr. *Jethro Tull*, as well as that acute, but Theory-Author, Mr. *Bradley*. And how neceſſary it is to give the World this Account, may appear by the right and wrong Management of cut down Wheat-crops, while in the Field; as it is performed by the *Hertfordſhire* and *Buckinghamſhire*, and the wiſer Northern and *Kentiſh* Farmers. In the firſt two Counties, I never knew them reap and bind as they go, though *Buckinghamſhire* for the moſt Part is a Vale, and *Hertfordſhire* a hilly or *Chilturn* Country: yet, as I have obſerved, it is conſtantly done in ſome of the hither Parts of the North, and in *Kent*, to their very great Advantage: But of ſuch Force is the Chain of Antiquity and Cuſtom, that it byaſſes Farmers, more than any other Set of Men in *England*, oftentimes to follow and practiſe thoſe Methods leſs advantageous, then what their near Neighbours do.

CHAP. VI.

Of the Benefits of ſowing a proper Wheat-ſeed *on a proper Soil*, &c.

DR. Plott's *Obſervations on Huſbandry*.— This Gentleman declares in his Writings, that he thinks Agriculture the leaſt improved of all other Arts, tho' it deſerves it moſt; for, as he ſays: Let Farmers entertain what Notion they will of their Abilities, and fancy they have brought Farming to the greateſt Perfection, and therefore refuſe to practiſe any new Method, though never ſo beneficial; yet he is bold to tell them, that if they were ſo

ſo knowing as they pretend they are, and they would put in Practice ſuch Improvements as they may be informed of, there would not be ſuch yearly Complaints of Loſſes by uncertain Crops of Grain, by Smuttineſs, by Blights, by the Laying of Corn, and by other Accidents that often happen: On the Contrary, Farmers are ſo ignorant of ſowing proper Seeds in proper Soils, and even unacquainted with Variety of Grains, though they grow near them, that they commonly commit great Miſtakes on theſe very Accounts; for Proof of which, he ſays, in *Oxfordſhire*, there is a Wheat called mix'd *Lammas*, being a white-eared red Wheat, that produces a more certain Crop, and greater Quantities than any other Wheat, and yet was unknown to many Farmers in the ſame County. Accordingly he ſays, the Grains of one County are much leſs known in another County, as is obvious by the red Straw-wheat, that ſeldom or never ſmuts, a Perfection moſt pleaſing to Wheat-buyers, yet it is not known, or is intirely neglected in moſt other Counties. The ſame is true of long Cone-wheat, though it ſeldom or never lodges, or is eaten by Birds, nor ſuffers by Mildews, one of which three Misfortunes ſometimes cauſes the Loſs of a Farmer's Crop.——Alſo the great Benefits, that *Putney* or Rath-ripe Barley is endowed with, as far as I can hear, has not brought it into Uſe, any where but in *Cornwal*, *Wiltſhire*, *Berkſhire*, and *Oxfordſhire*, altho' the Profits of its early ripening, one would think, ſhould induce Perſons to ſend for its Seed in Haſte to great Diſtances, for it has been ſown, mowed, and inned in two Months Time; ſeldom ever exceeding ten Weeks at moſt, notwithſtanding the cold Spring, wet Autumn, and very great Droughts, that may happen in the Time of its Growth: Which Benefits will be the better apprehended, when it is conſidered how other

Counties

Counties ſuffer, that, by vehement long Droughts, cannot ſow their Barley ſometimes till after *Midſummer*, as it happened in the Year he wrote this in, when many Farmers had green Barley at *Michaelmas*, as, he ſays, he ſaw in *Kent* and other Places, which he thought never became ripe: From whence he infers, that, had they made Uſe of this Rath-ripe Barley, though they ſowed it not before *July*, they might have it in the Barn before *Michaelmas*, for that it always ripens in the worſt of Summers. The Doctor farther enlarges and tells Mr. *Houghton*, that he may make himſelf ſo uſeful a Man, by communicating Improvements in Huſbandry to this Nation, for getting them into Practice; as that he would, for aught he knew, deſerve as much of the Public, as the Founder and Benefactors of *Chriſt's-Hoſpital*, as a juſt Reward for ſo great an Atchievement.

Remarks on Doctor Plott's *Obſervations by the Author.*—I think it was in King *William*'s Time, that the Doctor wrote this, when pirky and *Lammas* Wheats were not known ſo well as they are now. The white-eared red Wheat is called *Pirky-wheat*, which indeed fully anſwers his Character of it; and therefore it has, within theſe twenty Years laſt paſt, got into ſuch Reputation, that it has, in a great Meaſure, ſupplanted red *Lammas* Wheat both in Vales and *Chilturn* Countries, becauſe of its great Yielding and other Benefits, that I have in this Book given an Account of: And indeed I much wonder, that Gentlemen in particular do not ſend for this Sort of Wheat-ſeed far and near, to propagate it in their ſeveral Countries, becauſe it is a Wheat that will grow upon any Soil where Wheat can well grow. But it concerns all that ſend for it to me, to let me know the Soil they would ſow it on, that I may provide that Sort accordingly which comes off a contrary Soil

to theirs. And, if they have not a Conveniency to ſow this in the common Seaſons of *September* or *October*, it may be, and is often, ſown in the Months of *November*, *December*, *January*, and *February*, with good Succeſs; and ſometimes ſuch late Sowing has out-done the forward Sowing of Wheat, in very fruitful Years, when ſuch Wheat has been ſo Winter-proud, as to ſpend itſelf too forward, and then it is ſet and ſtunted in *April* and *May*, when it ſhould rally and grow moſt vigorous. In ſhort, this Wheat will bear Sowing later than any of the *Lammas* Sorts, and therefore is a very neceſſary Sort to follow a Clover, Turnep, Rye, or Cole-crop, that is eaten off before the End of *February*. As to the red *Lammas* Wheat, which, the Doctor ſays, ſeldom or never ſmuts, I muſt take Leave to aſſert the Contrary, that it is a Wheat more liable to the Damage of Blights, Strokes, and Mildews than any other, and not leſs to Smut than others. But, as to the long Cone-Wheat, he is abſolutely right in his Character of it, in writing that it is the leaſt ſubject of all others to the Rapine of Fowls, to the Damage of Blights or Strokes, and to Loſs by that Epidemical Diſeaſe of Corn, called *Smut*; yet more than ordinary to the ruinous Accident of falling down before it is reaped, for the Reaſons I have before aſſigned, and to the Beaks of Birds, while its large-bodied Seed lies near the Surface; but, in the upright Ear, it is out of their Power to hurt it, becauſe its ſtrong Beard ſaves it. And, though the Doctor has a little miſſed the Mark in ſome of theſe Particulars, he is very excuſeable, becauſe the Experience of Wheat-crops was not near ſo common in his Days as now, and therefore he may perhaps take their Character upon Truſt from one or more Farmers, who had not much Trial of the Matter: For, as to the Doctor himſelf, it muſt be confeſſed, he was a very learned worthy Gentleman, as appears

pears by his Writings, on *Oxfordſhire*, and other Parts of this Nation. He further obſerves, that Rath-ripe Barley is ſown in too few Places, and that, if this was more ſown, there would be many plentiful Crops enjoyed of Barley, where little or none grows; which is certainly true, as yearly Experience, and the Sowing it in remote Parts, plainly proves. I have ſent it as far as *Cumberland*, by putting it on Board a Ship at *London* for *Newcaſtle*, from whence it was carried (as I am informed) ſixty Miles by Land. But where ſuch Water-carriage lies near the Place of Sowing, or if Land-carriage directly from my Houſe, or from where the Barley-ſeed grows, is not too expenſive, I am of Opinion, no Gentleman nor Farmer ſhould be without it, for the Sake of its many beneficial Qualities: And ſo valuable is this Rath-ripe Barley-ſeed, that we *Gaddeſden* Farmers fetch it by Land-carriage near thirty Miles. Therefore, if any Perſon will order the Money to be paid me for it, on Delivery of it to the Maſter of a Ship, or to a Waggoner, I will faithfully ſend the true Sort. And, as Barley was never better got into the Barn, than it was in this Year 1742, any Perſon, that will have it bought and ſent them between this and *February* next, may enjoy the Seed in the higheſt Perfection. My Way is to charge the intrinſic Neat Price I buy it at, and leave it to the Buyer to allow me, for my Trouble, what he thinks I deſerve. And, to prevent that too common Misfortune of ſuffering by a Crop of Barley's being ſome Part of it green, ſome half ripe, and a third Part full ripe at Harveſt, which often occaſions the bad Malt it makes to deceive the Brewer, I have publiſhed a Steeping-Receipt in my *Practical Farmer*, by which Barley-ſeed will be obliged to come up at once in the greateſt Drought, and grow a-pace, if no Rain fall afterwards for two Months together. And if the

Ground is firſt made full fine, and well dreſſed or manured, there is no Fear, by the Bleſſing of Heaven, of enjoying a Crop of ſeven Quarters from one Acre of Land, as has been frequently proved. What an infinite Service I have done, on this Account, to only the Counties of *Suffolk* and *Norfolk* in particular, is well known to thoſe Gentlemen and others who have experienced this new and great Improvement. One Caſe of this was obvious, near *Beccles* in *Suffolk*, in the very dry Summer of 1736, when four Buſhels of Barley was the common Quantity off an Acre of their ſandy Soil: But here grew ſeveral Quarters on one Acre of the ſame ſandy Earth, by means of the Owner's infuſing his Barley-ſeed, according to my Receipt, which invited many, from diſtant Parts, to come and behold the Crop.

CHAP. VII.

Of ſowing Wheat *in chalky Lands*, &c.

TO *ſow* Wheat *in chalky Gravels and Sands.*—As *September* is the moſt proper Month to to ſow all ſtiff Loams and Clays with Wheat-ſeed, I have, in that, wrote largely on the ſame, by giving ſufficient Reaſons, why Wheat, in ſuch Soils, ſhould be ſown forwarder than ordinary, in order to prevent this beſt of Grain's being crippled, or loſt, by the Froſts and chilly Wets ſtunting its Growth, in its Infancy, contrary to that Wheat ſown in Chalks, Gravels, and Sands, in that Month; which, by Reaſon of their hot and dry Natures and too forward Sowing, would force on its Growth ſo faſt, as to cauſe it to ſpend itſelf before its due Time, to the great Damage, if not to the Ruin of the Crop, as it has often happened. Here, therefore, the Judgment both

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of the Author who writes on Farming, and the Farmer or Practitioner, is brought to the Teſt. If the firſt was to dictate the Sowing of ſtiff Loams or clayey Grounds, in *October*, and a chalky Gravel or Sand, in *September*, he would prove himſelf to be only a Theory-Author; and the Farmer, that follows his Rules, diſcover himſelf to be an ignorant Huſbandman. Or, if an Author ſhould adviſe to ſow Wheat, without diſtinguiſhing the Nature of the Seed, the Soil, and the Time of ſowing it, *&c.* he would, in plain Terms, act like a monſtrous Quack, in his Pretenſions to the Art of Phyſic, who, not knowing how to adapt a proper Medicine to a particular Diſeaſe, may, very likely, kill his Patient, inſtead of curing him. But the learned and ingenious Mr. *Worlidge*, whoſe Parts I do not pretend to come near, honeſtly declines particular Directions, relating to the Sowing of Wheat-ſeed, at a proper Time and in a proper Soil; becauſe he only wrote, or touched, on the many Branches of Huſbandry, and frankly owned his Inability of directing a Farmer in this Point, according to his own Words, *viz.*

'There is not any Grain, in our *European* Territories, more univerſally uſeful and neceſſary than Wheat; whereof there are ſeveral Sorts, ſome more agreeable and better thriving on ſome Sorts of Land than on others, ſo that it conduceth much to the Huſbandman's Advantage, rightly to underſtand the natural Temper of his Land, and what Species of Grain, and particular Sort of ſuch Grain, beſt agreeth with the Nature of it; as, ſome Sorts of Land bear Pulſes better than Corn, ſome bear Barley better than Wheat, and ſome Sorts of Wheat prove better on cold ſtiff Land, than on hot and dry, *&c.* We find many Sorts of Wheat, mentioned in

'our

'our Ruſtic Authors; as, Whole-ſtraw Wheat, 'Red-ſtraw Wheat, Rivet-wheat, white and 'red, Pollard-wheat, white and red, great and 'ſmall; *Turky* Wheat, pirky Wheat, grey 'Wheat, flaxen Wheat; I ſuppoſe the ſame, in 'ſome Places, is called *Lammas* Wheat; *Chilturn*, '*Ograve* Wheat, *Saracens* Wheat, with ſeveral 'other Names, though, it is probable, they may 'be the ſame Sorts. The grey Pollard, they ſay, 'delights beſt on ſtiff Lands, and ſo do the *O*-'*grave*, flaxen Wheat, and *Lammas*, on indiffe-'rent Land, and *Saracens* Wheat on any. But 'what the different Natures of theſe, and ſeveral 'other Sorts are, and in what Land they principal-'ly delight, and the Differences of their Culture, 'I leave to the more ingenious and expert Huſ-'bandman to find out and diſcover.' To which he adds,—— 'It is obſerved that the bearded 'Wheat ſuffereth not by Mildew, becauſe the 'Beard thereof is a Kind of Defence to preſerve it 'from the Dew. Wheat is uſually ſown in the 'Autumn, and beſt in a wet Seaſon; — *Triti-*'*cum Luto*, *Hordeum Pulvere*, *conſerite*; — and ei-'ther earlier, or later, as the Nature of the Land 'and Situation of the Place require.'— This leads me to remark on all that Mr. *Bradley* writes on Wheat in the Month of *September*, as follows:

'About the End of this Month *(September)* ſow 'Wheat in moiſt Lands, firſt taking Care to 'make convenient Drains, to carry off the Wet, 'if it ſhould happen in too great Abundance. 'And, to prevent the Wheat's becoming ſmutty, 'uſe the following Brine to ſteep your Wheat-'ſeed in, which was publickly recommended by 'the late Colonel *Plummer* of *Hertfordſhire*, and is 'of great Uſe: Having choſen the Wheat you 'would ſow, waſh it well in a Tub, through 'three or four ſeveral Waters, ſtirring it with a

'large

large Stick with great Force, and skimming off all the light Wheat which swims on the Top of the Water; and when you have thus cleansed your Wheat, put it in the following Liquor: Put a sufficient Quantity of Water in a large Tub that hath a Tap; to this put as much Salt, as, when it is stirred about, will make an Egg swim; then add as much Salt, as before, and stir it very well; after which, put two or three Pounds of Allum beaten very fine, and stir it about. This must be used like the ordinary Brines, only the Wheat must steep thirty or forty Hours, for less signifies nothing; though the common Opinion is, that Steeping so long kills the Seed in the Wheat, but Experience teaches the Contrary. You must take your Wheat out, the Night before you sow it, and sit some slaked Lime on it, which serves only to make it dry enough to sow. It is necessary to add some more Water to this Brine, as it wastes, with Salt proportionable to the Water, and about a Pound of Allum.

Now, to remark on this Receipt, I have to write, that it is well known to many in *Hertfordshire* especially, that Colonel *Plummer* was a very worthy sensible Gentleman, and, I believe, did the World a Piece of Service in giving this Receipt; but I am apt to believe, there was an Item tacked to it: That, in Case Wheat-seed was any Ways attended with Smuttiness, then such Washing in several Waters was absolutely necessary, to cleanse the Seed off its dangerous Nastiness, in order to prevent its breeding Smut in the next Crop: And it is the best Way of all others so to do; as I have in last Month, I think, sufficiently shewn. But I never knew, that a clear sound Wheat-seed stood in Need of its being washed in several Waters before Brining, in all my Life, and I have occupied my own and rented other Lands, for between

twenty

twenty and thirty Years, becauſe ſuch Waſhings muſt, in Courſe, be needleſs.—— Again, Mr. *Bradley* writes in this Receipt, that Steeping Wheat-ſeed leſs than thirty or forty Hours ſignifies nothing. I aver the Contrary, for, by common Experience, it is proved, that twelve Hours is as good as forty, provided the Seed, after Infuſion, is thoroughly limed, by applying a right true Stone-lime to it. The late famous Mr. *Belfield*, of *Studham*, in *Hertfordſhire*, was well known to the Weſtern Part of that County as a Yeoman that poſſeſſed a large Tract of Ground, that he held in his own Hands many Years, conſiſting of plowed incloſed Fields of different Soils. This Man never let his Wheat-ſeed lie in a Brine, that would but ſwim an Egg, above one or two Hours, at moſt; and all his Neighbours were ſenſible, he hardly ever had any ſmutty Wheat. And it is in ſuch common Practice, both in Vale and *Chilturn* Lands, to ſteep Wheat-ſeed in Brine but twelve Hours, or leſs, that I never knew any exceed that Time; nay I am certain, that there are two Ways of preparing and ſecuring Wheat-ſeed againſt Smuttineſs, without brining it, as it is yearly experienced; and ſo ſure are theſe Methods, that they did not fail the Farmers, even in the great ſmutty Years of 1740, 1741, 1742.— Again, Mr. *Bradley* ſays, that the Liming of Wheat ſerves only to dry it the better for Hand-ſowing. A Falſhood ſo wide of the Truth, that I never knew any Farmer but what laid a greater Streſs on the Liming than Brining: Accordingly I have, more than once, in my Travels been aſked, by Way of ſifting my Judgment, which was moſt efficacious, the Salting or Liming of Wheat-ſeed. If I had anſwered, the firſt was, I had been finely in for a rank Dupe. *N. B.* But, as I have here engaged my Pen to write on Sowing Wheat-ſeed in

chalky

chalky Soils, before I conclude this Chapter, I muſt obſerve, that it is the common Practice of the *Dagnal* Farmers to ſow near, or quite, three Buſhels of Wheat on every Acre of their chalky Ground; and this, becauſe the Froſts are apt to ſhoal this dry Earth, and ſo ſhorten it, as to give the Wind an Opportunity of blowing ſome of it from the Wheat-roots, and leaving them naked to their Deſtruction, and eſpecially when they ſow their Seed in Ridges or two Bout-lands. And therefore it is, that they ſow Seed enough to allow for the Weather's damaging ſome of it.

CHAP. II.

Of ſowing Wheat near Uxbridge.

HOW *they ſow their* Wheat *between* Amerſham *and* Uxbridge *in* Bucks.— In this Part of the Country, their Land is of ſeveral Natures, as a Gravel, a gravelly Loam, ſtony pebbly Earth, and leſs of the ſtiffer Sorts; which obliges them to plow their Lands, and to ſow their Wheat, in divers Manners, as in Broad-lands, in two Bout-lands, and in three or four Bout-lands, by plowing them with the two-wheel *Hertfordſhire* Fallow-plough, the two-wheel Bobtail-plough, the two-wheel Wood-chip Plough, the two-wheel *Hertfordſhire* double Plough, the two-wheel Wheat-ſeed Plough, and the pecked-ſhare Foot-plough, according to the Nature of the Soil and Seaſon of the Year. When they ſow their Wheat here by the Wheel, Fallow, or Bobtail-plough, they ſow it in Gravels or dry Loams, by harrowing it in, in Broad-lands. When they ſow it, by the pecked-ſhare Foot-plough, in a dry Loam, they

plow it by ſpraining in the Seed, or firſt ſowing it Broad-caſt and then plowing it in. When they ſow it here by the two-wheel Wood-chip Plough, they do it in three or four Bout-lands that are of the ſtiffer Sort, that is, in Earth that is a wettiſh ſtiff Loam, or in one that is between a Loam and a Clay. When they do it by the double Plough, they ſow it in Gravels, or dry Loams, which this excellent Plough will perform to great Perfection, beyond any ſingle Plough whatſoever that is made Uſe of in making of a two Bout-land, or Stitch, becauſe, the two Shares of the narrow double Plough (for there are two Sorts) ſtanding very near one another, the one, by immediately following the other, keeps up the Thoroughs in their Place, which, when turned by a ſingle Plough, are very apt to fall away from the Wheat-ſeed, to its great Damage; and thus the double Plough makes not only a Stitch at a Bout, but finiſhes it, as it goes: Whereas a ſingle Plough is obliged to go two Bouts to finiſh a Stitch, and then the Ploughman commonly draws out the Thoroughs, and the Sower ſows moſt of the Wheat-ſeed, before they can be hented up for good; in which Interval of Time, great Rains ſometimes fall, and ſpoil the beſt Part of an Acre, or two, in one Day. Indeed, where a Wheat-ſtitch is made by a Foot and a Wheel-plough following one another directly, the one to draw out, and the other to hent up, it anſwers to near one and the ſame Purpoſe; but, then, here are two Teams, two Ploughs, two Men, and two Boys, to drive, employed, in the Room of one Team, one Ploughman, one Plough, and one Driver. But, for a much fuller Explanation of this, ſee Page 98, in my *New Experiments in Huſbandry* for the Month of *April*, and Page 2, in *The Modern Huſbandman* for the Month of *May*; which double Plough I will furniſh any Perſon with,

with, at a reaſonable Price. In theſe Parts live ſome good Huſbandmen, who underſtand, how to make Uſe of a proper Plough at a proper Time, according to the Nature of the Ground, and to ſow it with a Wheat-ſeed that ſuits the Nature of their Soil. Here they plow a-croſs commonly twice in a Summer, as well as long-ways; in both Forms, they ſtir their Ground in Hacks, Bouts, and two and three Bout-lands, till they get it into a fine Tilth, ready to begin Sowing, about the Beginning or Middle of this Month. If the Land lies moiſt, and is of the ſtiff Sort, then they ſow it in two Bout-lands with the Wheat-ſeed Wheel-plough; if it is ſtiffer, then they ſow it with the Wood-chip Wheel-plough in three and four Bout-lands. Of late, they ſow their Ground, in theſe Parts, moſtly in this Form, becauſe the two Bout-lands lie thinner and narrower, which gives the Froſts and Wets an eaſy Opportunity to penetrate them and ſtarve the Wheat, as it happened to many Acres in the Year 1740; which has frightened many of theſe Farmers from ſowing Wheat in two Bout-lands, for, in three and four Bout-lands, it lies drier and ſafer from Floods and Froſts; which leads me to make a nice Obſervation, on the Practice of this Part of the Country, *viz.*

CHAP. IX.

On different Sowings of Wheat *in two particular Counties.*

A *Nice Obſervation, on the ſowing* Wheat-ſeed *in three and four Bout-lands in* Middleſex *and* Buckinghamſhire.— In laſt Month I have obſerved, that their Lands are, for the moſt Part, of a

ſtiff, loamy, clayey Nature in *Middleſex*, and lie wet and flattiſh; which obliges their Farmers to ſow their Wheat-ſeed in a Manner moſt agreeable to their Earth and its Situation. For this Purpoſe, they altogether make Uſe of the Swing-plough, that turns up a Thorough or Furrow very ſhallow, or very deep, into three or four Bout-lands, which, about *Acton*, they ſow Broad-caſt, and plough the Wheat-ſeed in, leaving little, or none, in the Water-thoroughs; becauſe, in gathering up the Earth to leave a large Drain for carrying off the Waters, the Seed is gathered up by the Plough, and laid to the Bout-lands. Now, they are obliged to leave large Water-thoroughs, to keep their Wheat dry, though it cauſes them to loſe, I believe, more than one Foot of Ground in ſeven, throughout a Field; even more than they do in *Ayleſbury* Vale, by ſowing their Wheat in Ridge Broad-lands; and more than thoſe Farmers do between *Amerſham* and *Uxbridge*, though they ſow their Wheat in three and four Bout-lands, as I am going to ſhew. After their Ground is got into a fine hollow Tilth (which to effect, they plow oftener than I ever knew any other Country do) they plow it, the laſt Time, with their two-wheel Wood-chip Plough into three or four Bout-lands, and commonly ſow two Buſhels and a Half of pirky or *Lammas* Wheat (but for the moſt Part, the former) over each Acre throughout a Field, by the Broad-caſt Throw, which ſpreads the Seed over all the Ground, as it lies in the rough Condition the Plough left it in. When this is done, they immediately harrow all ſo flat down, that the Seed grows in the Ridge-part of the Land, as well as in all the Thoroughs; and thus they loſe little or no Ground at all; and yet there remains a Sort of Water-thorough for the Wets to drain off, which ſeldom cauſes the Wheat, in this Part of

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Buckinghamſhire, to ſuffer that grows in it, becauſe their Land here is not of that very ſtiff Nature as to hold Water, like that in *Middleſex*.— However, of late, theſe Farmers, who only harrow all their Wheat-ſeed in on theſe three and four Bout-lands, have been proved by Experience to be wrong in their Management; I mean, in their Mode of ſowing their Wheat-ſeed all at once, becauſe it thus lies expoſed on the Top of the Ground to Froſts and Droughts; and therefore it would be a much ſecurer Way, to ſow Half the Wheat-ſeed firſt Broad-caſt and plow it in, and the other Half Broad-caſt on the rough Ground and harrow it in. As a Proof of this excellent Way, a Trial has been made; and the Succeſs of it cauſed it to be approved of by ſome of the more knowing Sort of Farmers, who now follow no other Method of ſowing. Here the Drill-huſbandry will not anſwer, becauſe theſe Sorts of Lands are either too ſtony, or too ſtiff and wet: Therefore, if I could not write on different Soils, my Pen muſt ſtop, or I muſt be obliged to have Recourſe to Theory, and direct only what, by an uncertain Notion, I may think probable.

An Account of ſowing Wheat-ſeed in the chalky Soils of Ivinghoe *Common-field.* In chalky Soils, Wheat-ſeed is commonly ſown early in this Month, that the Wheat may get a good Head againſt the froſty Seaſon. Here ſome ſow their Seed in two Bout-lands, others in Broad-lands; the Advocates for the firſt ſay it is beſt done ſo, becauſe, in this Poſture, the Wheat-ſeed cannot well be buried as in Broad-lands, and that, as one Thorough ſhelters another, the Winds have not ſo much Power to hurt it, as in Broad-lands. Others alledge, that Wheat, lying in the Stitch-ſhape, lies too high and dry, and is much more expoſed to the Violence of Winds and Froſts than that ſowed in Broad-lands; for, when it lies in Broad-lands, it remains

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and grows, in an even, low, ſnug Poſture, the moſt of all out of the Power of Froſts, Winds, and Droughts; and, when Wheet-ſeed is ſown in Chalks, and they are dreſſed with rotten Dung, or better with Rags, as the common Way is in our Parts, it will keep this Earth warm, moiſt, hollow, and looſe, free of the Danger of binding in and burying the Seed. When chalky Ground is ſown with Wheat, it ought to be done, when the Ground is moiſt or wet, that this looſe Earth may cloſe with the Seed, and cauſe it to ſtand faſt againſt the Severity of Weather; for, if a Chalk is ſown in a very looſe dry Condition, the Wheat will very likely fall down, before it is ripe, and be damaged by the Growth of the Poppy, for moſt Part, of the Summer. In order to ſow Wheat in this chalky Soil, after the laſt Plowing, but one, is performed, all the Ground is to be harrowed plain; and then, if the Land is to be dreſſed with woollen Rags, that have been chopped, they empty a Sack of them at certain Diſtances on each Acre of Land, till they have laid three or four hundred Weight of ſuch Rags on the ſame: Then comes a Man with a Seed-cot, who fills it ſeveral Times from each Heap, and ſtrews the Rags, in as exact a Quantity as he can, all over the Acre. When this is done, the Seedſman comes next, and ſows out of a Seed-cot, by Way of Broad-caſting, two Buſhels, or two and a Half, or two and three Pecks of pirky Wheat-ſeed (which is the beſt Sort of all others for a dry, lean, chalky Soil) over all the Acre of Land. Then the Ploughman begins his Work, and, with his Foot-plough, turns and plows all the Rags and Seed in together; aſſoon as one Acre is done, he begins another, and ſo on, till the whole Field, or Piece of Ground, is finiſhed, in which Condition he leaves it, till Weeding-time in *April*, or *May*, when the Farmer, with Weed-hooks,

hooks, and Hands, is generally well employed; with Weed-hooks, to cut up ſome Sort of Weeds, and with Hands to pull up others; as, the deſtructive Curlock and Poppy, which generally infeſt this Sort of Ground more than others, eſpecially the red wild Poppy.

The Benefits of ſowing Wheat *in the Broad-land Poſture*, &c. In chalky, ſandy, and gravelly Soils, they do not begin to ſow Wheat, till about the Beginning of this Month, as I ſaid; becauſe the dry warm Nature of theſe Earths, if aſſiſted by good Dreſſing, will throw up a cover Time enough to ſecure the Wheat againſt froſty Weather, and the better when the Seed is plowed in with their Foot-Plough, by reaſon its broad-pointed Share will turn the ſhalloweſt Thorough that can be deſired; which is what is perfectly neceſſary to be done, eſpecially where a hard Rag-ſtone, or hurlucky Bottom, lies under the Chalk, as it does in *Ivinghoe* Common-field, and in many other Places, that is of ſo looſe and hungry a Nature, as to devour and conſume ſome Sorts of light Dreſſings in a little Time, to the Starving of the Wheat-roots. Here, therefore, ſeveral of their beſt Huſbandmen dreſs this dry, lean, looſe, and hungry Soil twice in the Fallow-ſeaſon; once by folding over all the Land, and at Sowing-time with Rags, as I have ſhewn. Others dreſs with the Fold in the Summer, and with *London* Soot in the Spring-time; but nothing comes up to the woollen Rag in this Soil, becauſe, the Rag being of a greaſy, tough, and ſpungy Nature, it lodges and holds Water a long Time, keeps the Roots of the Corn moiſt in dry Land, warms them in cold Weather, and cauſes them to withſtand the Waſh of Rains, that eaſily carry down ſome of the lighter Dreſſings into the Hurlock or Rag-ſtone, to the great Loſs of much of their Vertue. But here, in this open Common-field, it has,

has, for a few Years paſt, been attempted to obtain plentiful Crops of Wheat, by making Uſe of the two-wheel Wheat-ſtitch-plough, and ſowing the Seed in two Bout-lands: But now they are weary of this Way, and have left it off to ſow their Wheat-ſeed on Broad-lands, as formerly; becauſe, as I have obſerved, as it lay in the Stitch-poſture, the chalky ſhallow Surface was ſo highly expoſed, that the Winds and Froſts made an eaſy Penetration, and, with the Waſh of Rains, cauſed the Earth to fall away from the Roots of the Wheat, and thus they became uncovered, and many of them died; and thoſe, that remained, had ſo weak a Bottom, that, before Harveſt, many of them could not ſuſtain their Stalks in an upright Growth; whereas, when Wheat is ſowed in Broad-lands, their flat Poſition ſecures it very much againſt theſe Diſaſters. Now, when they ſow theſe Broad-lands with Wheat-ſeed and plow it in, the Sower ſows the Seed twice in a Place Broad-caſt; which is a better Way than ſpraining the Seed in by a Man's Hand after the Plough, becauſe the Wheat is then ſown in a narrow Compaſs, and alſo falls the harder and lies cloſer and deeper in the Ground, which confines the Seed to come up the more in Rows: But, when it is ſown Broad-caſt, it falls light and will come evener and better.— Thus, in all light dry Loams, ſandy and chalky Loams, and intire Lands, and whenever Ground is light and fine, the beſt Way is to ſow Wheat-ſeed Broad-caſt in Broad-lands, and plow it in with the two-wheel Pea-ſtitch Plough, becauſe this narrow Plough turns up a narrow Thorough; and it is a ſtanding Rule in Huſbandry, the more Thoroughs, the greater the Crop, and why, but becauſe the Ground is thus more broke, made finer and looſer, and the Thoroughs lie cloſer, whereby the Wheat-roots are kept the warmer and drier, and, at the ſame Time, enjoy the greater Supply of Mould to nouriſh them, all the Year after

after: For it is certain, that many Crops of Wheat have been very much damaged, by plowing and turning large Thoroughs on the Seed, which has buried ſome, and left others in a ſhallow Condition; for, between large Thoroughs, the Corn has not its due Share of Mould, and therefore is the more expoſed to the Violence of Froſts, the Chill of Waters, and to the Deſtruction of Weeds. But where Wheat-ſeed is to be ſown in a ſharp raſhy Gravel, where little Mould lies between its ſmall Stones; I ſay here, the beſt Way to ſow Wheat is in Broad-lands, and after the following Manner: When this Earth is plowed into Broad-lands, for the laſt Time, then, on the rough, Ground, ſow Half your Wheat-ſeed Broad-caſt once in a Place, and harrow it once in a Place; when this is done, ſow the other Half of the Wheat-ſeed once in a Place Broad-caſt, and harrow it in twice in a Place croſs-ways, and the Field is done with. Now, why the Management of ſowing Wheat-ſeed in Chalks differs from it in Gravels, is to be accounted for thus: This gravelly Soil has commonly a poor Bottom, and, therefore, the deeper the Wheat-ſeed lies, the greater Poverty it will meet with, for, if any Part of a Ground is good, it is the Surface or upper Part; and becauſe this Earth is the moſt binding Sort of all others, for, if a Farmer has not a dry Time to ſow his Wheat-ſeed here, he will be badly off. I have a three Acre incloſed Field of this Sort, which obliges me to ſow this warm Land late and in a good Seaſon; and yet, if Rains ſhould follow the Night after, or the next Day, they will be apt to make this Ground run together Pancake-like, and bind ſo hard, as to hinder many of the Wheat-ſprouts or Blades from coming out: But ſandy, chalky, and gravelly Loams, as they are Medium-Earths, ſeveral Farmers ſow them in two Bout-lands with

pirky and yellow *Lammas*-wheats mixed together in equal Parts, becauſe ſuch are found to agree extraordinary well with any of theſe Lands; as appears by the great Crops they annually reap in thoſe Common, large, open Fields lying in the Pariſh of *Pitſtone* in *Buckinghamſhire*, where they dreſs theſe Loams with the Fold or Rags; if with Rags, they ſow them firſt all over the Land, as it lies flat, and then plow them and the Wheat-ſeed into the two Bout-lands; and here, if any of the Rags lie out of the Earth, a Man goes with a Paddle-iron and thruſts them into it, and the like in Broad-lands.

CHAP. X.

Of the bad Management of a Farmer.

HOW *a* Farmer *had commonly bad Crops of Grain, becauſe he knew not the Value of proper Dreſſings.*— A Farmer, who lives ſo near a great Common, about two Miles diſtant from my Houſe, that his Eight-ſcore Sheep have but a little Way to go out of the Fold, before they come on it, a Conveniency that many Thouſands want, notwithſtanding this Advantage, ſeldom gets a good Crop of Grain; and, even in this plentiful Year 1742, when moſt Farmers got large Crops, he had none that deſerved the Name of a good one. The Reaſon of this I am going to ſhew: This Farmer, having the great Conveniency of feeding his Sheep on a fine near Common, is under the Belief that Dreſſing his Land with this, and all the Stable-dung he makes, is ſufficient; and that, if he ſhould be at the Charge of any other auxiliary Dreſſing, it would be Money thrown away, by Reaſon all the Land he rents, or moſt

moſt of it, is a ſharp Gravel that would be little or nothing, the better for ſuch Dreſſing; as he finds by the ſmall Service his Folding and Stable-dung do on the ſame Land. Now this Farmer, I believe, is near ſeventy Years of Age, has been bred up to the Farming-buſineſs from his Cradle, and has Money at Command to buy any Manure or Dreſſing, which Thouſands would do, if they could; yet nothing has prevailed with this obſtinate, tenacious, and ignorant Farmer to aſſiſt his hungry gravelly Soil, with any thing but Crow-dung, beſides his Fold and Stable; although he lives but about two Miles off one of the brighteſt Examples, I believe, in *England*, and it is proved by two Farmers, who have got good Eſtates out of ſuch Ground, as I ſhall make appear by the following Account, *viz.*

How two Farmers *have got Eſtates out of a poor hungry, gravelly, chalky Earth.*— Theſe live, at this Time, in *Ivinghoe* Pariſh, which is ſo large as to extend its Bounds into the very low Vale of *Aylesbury*, and into the very high *Chilturn* Country. It is in this laſt that two Farmers live, who rent about ſeventy Pounds a Year a-piece; one whereof is a Quaker, and both live ſo cloſe to each other, that ſome of their Lands join; and they go on after one Way of Farming to very great Profit, for each of them keeps about three hundred Sheep to fold on their poor, gravelly, and chalky Grounds, which they are enabled to do, by the Help of *Ivinghoe* Common and their own incloſed Fields. But this is not all by a great Deal; for theſe knowing Farmers carry their good Management much farther, being of Opinion, that, by laying out the Value of a ſingle Dreſſing, they get the Value of a treble one. To explain this will be very eaſy, when I make known their Expence in buying large Quantities of *London* Soot every Year,

beſides other Dreſſings; for, as their Farms lie thirty Miles diſtant from *London*, every Buſhel of Soot coſts more than three Pence Carriage, which with ſix Pence a Buſhel for the Neat Soot (provided it is bought in Summer againſt the next Spring) coſts nine Pence in all. But, by the worſe Manager, it is bought in *January*, *February*, and *March* for eleven and twelve Pence a Buſhel, Carriage included, though it is delivered at *Hempſtead* two and twenty Miles from *London*, from whence they fetch it in their Waggons, or Carts, after they have, the ſame Day, delivered their Corn to be ſold at this great Market; ſo that, notwithſtanding this back Carriage of their Soot, perhaps, eight or ten Miles by the Farmer's own Team, and paying eight Pence a *Score* as we call it, that is, for ſowing twenty Buſhels of it over each Acre, they think it well worth their while to buy and ſow it on ſome of their ſeveral Sorts of Ground every Year; which, with their Folding, cauſes their Crops of Wheat and Barley to rally in the cold pinching Spring-ſeaſon, when other Crops are declining, inſtead of flouriſhing, that go without ſuch a beneficial warm Aſſiſtance. But this is not all. Theſe Farmers buy Rags, Horn-ſhavings, Hooves, Cows and Hogs Hair, *&c.* and apply one of them to their hungry gravelly Ground, which proſpers moſt of all under the Help of theſe tenacious, durable, and tough Dreſſings; for, as a gravelly Soil is compoſed in a great Meaſure of Pebbles, or very ſmall Stones, it proves a Sort of Strainer, or Drainer, to powdered or other thin Dreſſings, which are ſoon diſſolved or carried down below the Roots of the Corn, by the repeated Waſhings of great Rains, unleſs they join the Fold or other Dreſſing to them. In ſhort, theſe two Farmers have got good Eſtates, meerly by their well Managing a ſeventy Pounds a Year

Farm

Farm each; for, in ſuch poor Soils, a Penny, kept back from being laid out in Dreſſing, is two Pence or three Pence loſt. This plainly proves the abſurd, obſtinate, old Farmer, I have, juſt before, been giving an Account of, to be notoriouſly wrong in the Management of his gravelly Farm, becauſe, by not dreſſing his Wheat and Barley Crops ſufficiently, his after *Lent* Crops are ſeldom worth more than Twenty or Thirty Shillings an Acre, and ſometimes not that; he, therefore, ſince his Farm is about the Bigneſs of theirs, ſhould buy every Year, like them, ſix hundred Buſhels of *London* Soot, beſides other Dreſſings, to be a compleat Manager of ſuch a hungry Farm; and then neither he, nor any other, who does the ſame, will ever come under that great Loſs which befel a young Farmer, about the Year 1736, at *Buttermere* in *Wiltſhire*, ten Miles diſtant from *Newbury* in *Berkſhire*, who, being juſt married, laid out moſt of his Wifes's Fortune in ſtocking a large chalky Farm, but neglected very much the Dreſſing-part; inſomuch that, after ſowing forty Acres with Oats in one Spring-ſeaſon, he had ſuch a poor Crop in Return, that he thought them not worth mowing, and, therefore, turned all his Horſes into them to feed, as on ſo much Graſs. The Conſequence was, that he broke, I think, the ſame Year, as I was informed on the Spot, the Year following, when the Landlord of the ſame Farm was obliged to take it into his own Hands. This particular Caſe, as well as the Conſideration of ſeveral others, leads me to praiſe the new and moſt excellent Method of ſowing Wheat, and other Grain, in the Drill-faſhion.

CHAP.

CHAP. XI.

The great Improvement of Drill-ſowing.

THE Drill-faſhion *of ſowing Wheat-ſeed proved to be the beſt.*—As Trees planted at a due Diſtance, grow faſter and larger, and their Fruits ripen much better, than thoſe planted in a cluſterous Manner; ſo Corn, in a great Degree, grows quicker, larger, and in greater Quantities, when ſown in Drills, than that ſown in a promiſcuous Manner, as the common Way is, becauſe it receives much more Nouriſhment from the Ground and Air, than when it grows in a thick and cloſe Poſture. Now what I would here chiefly obſerve is, that, by the Help of the three-wheel light Drill-plough, Chalks, chalky Loams, ſtiffiſh Sands, and a gravelly Soil, if it is fine and well mixed with a loamy Earth: I ſay, any of theſe, and ſome others, may be ſown, in this Month, with Wheat-ſeed, by the Drill-plough, to a very great Advantage. And I am thoroughly perſuaded that the young *Buttermere* Farmer, I have been juſt mentioning, need not have broke, had he known and made Uſe of this moſt ſerviceable Drill-plough, the Horſe-break that belongs to it, and another Tool I have not named; for it is an undeniable Matter of Fact that, by the Operation of this Plough, not only a poor Earth may be made rich, but ſuch Ground may alſo be ſown every Year to great Profit, without being obliged (as is moſt cuſtomary) to loſe the Benefit of the third or fallow Year. Surely you Gentlemen of landed Eſtates, whoſe Earths will admit of ſowing Corn in Drills, are very much wanting to your own Intereſt, in not encouraging your Tenants to make Uſe of this Pay-rent Inſtrument;

ment: Or, if they are unable to purchaſe it, or through Obſtinacy unwilling (as they are, in general, moſt groſly attached to their old Methods) you ought, I ſay, to be ſo much your own Friends as to buy one for them, and to ſhew them, firſt, by ocular Demonſtration, the Effects of this great Improver, which, if rightly managed, will ſurely anſwer the End I propoſe; and the Knowledge of ſuch Management is eaſily attained, becauſe it is a plain Plough, free of many of theſe mathematical Intricacies, that ſome Ploughs have been furniſhed with. It ſurely proves theſe Gentlemen to be ſuperior Wits and great Promoters of their Country's Good, who have already bought and beſpoke the three-wheel Drill or Pulley-ploughs, and they deſerve to be famed accordingly; but, as my Buſineſs and Duty is not to name particular Perſons, without Leave, I ſhall always forbear any ſuch Thing, and only add that, by this three-wheel eaſy-worked Drill-plough, and the ſeveral Inſtruments I have diſcovered in my Travels, and before publiſhed in my Monthly Books, this Nation may, (by the Bleſſing of Heaven) be made to become the greateſt Magazine for Corn in *Europe*; and, that I may make my Writings on this golden Grain, Wheat, the more compleat, I ſhall here publiſh the Receipt, ſo much practiſed in *Middleſex*, and elſewhere, of preparing Wheat-ſeed for ſowing in this Month; as being the more neceſſary ſo to do now, than in the former Month of *September*, becauſe it is a hotter Compoſition, than others, for this colder Month.

CHAP.

CHAP. XII.

Of preparing Wheat-ſeed *for Sowing.*

HOW *to prepare Wheat-ſeed and ſow it, after a new Way in* Middleſex. I have, in my former Works, obſerved, that the *Middleſex* Graſs or Meadow-farmer is the beſt Graſs-farmer in *England*; but that their Plough-farmers are but very indifferent ones, becauſe they are apt to plow their low, ſtiff, and wet Earths in ſo negligent a Manner, and ſo wrong in one Reſpect, that they ſuffer by it; for here they ſeldom have a true, ſweet, and fine Tilth for their Wheat-ſeed, by reaſon they do not plow their Ground croſs-ways often enough, nor then plow it in ſharp and ſingle Bouts, as being a Mode contrary to their Country Faſhion, and therefore turn them who can? It was on the twenty-ninth of *Auguſt*, 1742, that I was walking through a Bean-field, that lay in *Middleſex*, or very near it, when I ſaw the Thiſtles ſtand blown as high as the Beans, and they ſeemed at a Diſtance to be as thick too; a Sight that I never beheld before, in all my Travels. If a Man pretends to talk them, out of their own wrong, into a righter Way, it is the ready Road to be ridiculed; for too many of theſe are ſuch Maſters of that Sort of Language, that they pride themſelves in their acute Swearing and Bantering down the Truth that is contrary to their Sentiments. But, as ſeveral of theſe Plough-farmers prepare their Wheat-ſeed for Sowing, after a pretty good new Method, I ſhall here inſert their Receipt, *viz.*

The Receipt. — At Night, the Farmer puts in a ſufficient Quantity of clear Water into a large Tub, in which he had fixed a Tap and Tap-whips; in this

this he puts five Buſhels of Wheat-ſeed for ſowing two Acres of Ground, and immediately ſtirs and ſkims off the Seeds of Weeds and all light Kernels; then he directly draws of all the Water, and takes out the Wheat-ſeed. When this is done, he puts in another or freſh Parcel of clean Water into the Tub again, with a Pint of common Salt and a Pottle of Stone-lime, which, with good Stirring, will ſoon diſſolve; then he puts in his five Buſhels of Wheat-ſeed again, and, with a Stick, ſtirs about and well mixes the Wheat, Lime, and Liquor together, and in this Condition lets all remain till next Morning, when he draws off the watery Part, and lays the Wheat on a Heap on the Ground to drain, dry, and ſow, when the Servants have breakfaſted. If you find the Kernels have not Lime enough about them, you may ſift on more, but they have, this Way, generally a ſufficient Quantity lodged on them. But to proceed. In order to get the Ground in a Readineſs for Sowing it with Wheat, about the Beginning of this Month, they fallow it up in *April*, and commonly by plowing two of their four Bout-lands into one; at the firſt Stirree-time, they plow this one Bout-land, and another ſuch, into one Broad-land; at the ſecond Stirree-time, they hack it a-thwart, and next harrow all plain: Then, at the fourth or laſt Plowing, they ſprain and plow in their Wheat-ſeed in three or four Bout-lands, the Way the Drain lies, leaving two Water-thoroughs by moulding up the Earth out of them to the Bout-lands, and little or no Seed in them; and thus it is that they lay up their wet Land high and dry, and leave, at the ſame Time, a large Paſſage for Floods of Waters to run quickly off. But, to be more particular in my Account of improving theſe flat, ſour, heavy, and wet Earths, by a new Method of plowing, I have this Notion to advance, that, in a dry Seaſon in

Summer-time, two Horſes may be put a-breaſt and one or two length-ways before, to draw the Swing-plough; or, if they have an iron Cock with Notches at the End of the Beam of their Plough, or what ſome call *Notch-geers*, they may plow with Horſes all in Length a-croſs their Broad-lands; that is, after they have plowed three or four of their ſmall Lands together into one Broad-land, and ſo throughout the Field, they may, after Harrowing all plain, plow their Ground a-croſs into ſingle Bouts, which is what may be ſaid to be a full half Plowing of the Earth. The next Time, it is to be bouted off the laſt Bouts; then run the Plough through the Middle of each Bout, which will almoſt level the whole Land, and then it is all plowed and broke; which, when harrowed, is fit to be plowed a-croſs into three or four Bout-lands, and to have Wheat-ſeed ſown in the ſame. This is a much better Way to get their Ground into a fine ſweet Tilth than is commonly practiſed at preſent, and exceeds all flat and other of their Ridge-plowings; for ſo it is, that theſe Farmers ſtand in the greateſt Need of any Item, that may be ſerviceable to inſtruct them, how they may get their Ground fine and ſweet, becauſe, without theſe Qualifications they have not much Reaſon to hope for a full Crop of Wheat. But, inſtead of ſingle Bouting up their Ground, they plow it, by Way of Hacking, once in a Summer; which, indeed, is a Sort of twice ſtirring or plowing the Earth, but it does not break and ſweeten it, nor kill the Weeds, like ſingle Bouting it. If theſe *Middleſex* Farmers can enjoy a dry Plowing-ſeaſon, and plow their Ground, after the Manner I have directed, they need not be at the Trouble of burning the Couch-graſs that their ſour and clung fallow Land produces, every Year, in Abundance in many Places; nor likewiſe at the great Charges of weeding

weeding their Grounds, in the Spring-time, when they are forced to employ many Hands to get the Weeds out of their Wheat, Peaſe, Barley, and Beans; not only to the great Damage of the Wheat by the Tread of the Weeders, but otherways to their great Loſs, for I have known it coſt one of their middling Farmers ten Pounds in one Year, to clear their Fields of Weeds. But this is not all that I have to obſerve, on the Negligence of many of theſe *Middleſex* Farmers: There is another main Fault that more or leſs of them, every Year, juſtly deſerve to be upbraided with; and that is, their fallowing their ſtiff clayey Lands ſo late as in *May*, which is as great a Miſmanagement in theſe Farmers, as it would be for the other Sort of Farmers, whoſe Land is a raſhy Gravel, or a light Sand, to plough it too ſoon; for one Plowing, in ſuch light Earth, does generally as much Service as two or three in a much ſtiffer Soil; ſo great a Difference is there in the Knowledge of Farming. For Example, If I was to plow up my ſmall pebbly, raſhy, gravelly Field the Beginning of *April*, and plow it four or five Times, the ſame Summer, for ſowing Wheat; and alſo, if frequent Rains ſhould happen in that Time; great Part of that little Mould, that lies between the ſmall Stones, might, perhaps, be waſhed a conſiderable Way down, to the Impoveriſhment of the next ſucceeding Crop of this valuable Grain, becauſe the Bottom of this Soil is of ſo looſe a Texture, as to give a very eaſy Paſſage to Rains for carrying down much of its beſt Earth. But it is not ſo with thoſe ſtiffer Lands, which lie ſo flat and wet, that, to my certain Knowledge, ſome of them could not be got into a fine and ſweet Tilth, in a whole Summer, though they were plowed, early and late, five ſeveral Times in that Space. Nay, I may affirm with Aſſurance, that many Fields, even in our *Chilturn* Country, whoſe Soils

were of the ſtiff Sorts, but lay much more commodious for a quick Drying than thoſe in *Middleſex*, could not be got into a ſweet and fine Tilth in a whole Summer, notwithſtanding all the Art and Labour that were uſed to obtain the ſame; and then follow the Loſſes which commonly attend the Sowing of Wheat-ſeed in rough twitchy, and ſour Tilth-earths; as, the Burying of a great deal of the Seed, ſo as never to come up, the exceſſive Thinneſs of a Crop, a poor, ſmall, dwindling Ear and Kernel, and the great Charge of cutting out Weeds from the Corn, that ſuch Ground ſeldom, if ever, fails of being the Occaſion of. But the Damage does not end here; I muſt alſo obſerve, that, when ſuch a ſour Tilth produces a thin poor Crop of Wheat, the ſame Ground is more than ordinarily exhauſted by the Growth of Weeds, that, infallibly grow up where Corn does not. On the Contrary, where a full Crop of Wheat is, there the Weed is overcome, and, being prevented from growing, the Bulk and Cover of the Crop keep in the Spirit of the Earth; becauſe the Sun, here, cannot exhale it, nor force the Breed and Growth of Weeds, but will ſo hollow the Ground, that one Plowing, next Time, will prove as good, and go as far, as two or three would, if a thin, poor Crop of Wheat had grown on the ſame.

How a Gentleman plowed twelve Acres of Ground, in one Day, with only one Pair of ſmall Bullocks and one Man to drive and hold the Plough. This Gentleman, the Miniſter of a Pariſh, in the *Author* I have mentioned, ſays, He plows the little Glebe-land, he holds in his own Hands, with three ſeveral Sorts of Wheel-ploughs; one of which (being like thoſe in *Northamptonſhire*) ſerveth to give his Land the firſt Turn or Tilth. The ſecond Plough, which is for the ſecond Turn or Tilth, has two broad Boards, with which it throws the Earth both Ways, and

and ſo breaks it much better than the common Ploughs do; ſince, by this ſingle Operation, the Ground is twice ſtirred, whereas the *Northampton-ſhire* Wheel-ploughs ſtir it but once. The third Plough is almoſt like the ſecond, and differs from it only in this, that the Side, or broad Board, of this laſt is four Feet long, and the other but two. Now, with this Sort of double Broad-board Plough, he ſays, they plow at *Poitou*, in *France*, twelve Acres of Ground, in one Day, with Eaſe, by the Draught of only two Pair of ſmall Bullocks, and one Man to drive and hold the Plough. Before this, he ſays, he uſed to hire his Plowing, and then the ten Acres coſt him four Shillings an Acre, for once Plowing; but, by this Method, the Whole ſtood him in no more than five or ſix in all, and he makes it out thus: He ſays, on being aſked by his Neighbours, whether his Wheat-crop would be worth any Thing, he replied, God knows that, but this he knew, that his Crop appeared as well, or better, than theirs; though theirs coſt them much more, for that they were eight Days, with four Horſes and two Men to their Plough, doing that which he eaſily did, in three, with two Creatures that went but little faſter than Snails: And this, he ſays, will plainly appear to be ſo, when it is underſtood, that they went two Days Journies a Day, and held it five or ſix Hours, each Journey, becauſe Bullocks can bait ſooner, and are better able to perform it than Horſes; and becauſe the Bullocks make a Ridge at once Going, when the common Wheel-plough, with only one broad Board, goes four ſeveral Times, to make a Ridge. Thus the double Broad-board Plough goes no more about to plow ſix Acres, than the other does to plow one Acre and a Half. Now, when we are to ſow this my Ground with Wheat, after it is well fallowed, we harrow it plain, and plow it into ſmall, Ridges at equal Diſtances, with the ſecond Plough; and, the Ground being, thus, made

made ready for Sowing, we ſow it with Wheat, broad-caſt, which cauſes the Seed to lie in the Thoroughs. As ſoon as this is done, we take the third Sort of Plough, and part every other Ridge into two, and thus cover two Thoroughs, at a Time; by which I make a Ridge, at once Going, while others always go four Times. This Way is allowed, by all that ſee its Performance, to be the cheapeſt of all others; yet there is this to be ſaid, that, if theſe two Bullocks can plow ſo much Ground, in ſo little a Time as I have mentioned, how much more will four Horſes do, in the ſame Time? For their Nimbleneſs and Strength muſt vaſtly exceed thoſe two ſlow Creatures that draw the Plough, by being yoaked by their Horns.

CHAP. XIII.

Of LIQUORICE.

OF making and managing a Liquorice *Plantation.* This excellent, pleaſant, and wholeſome Plant is now planted in ſeveral Parts; but the chiefeſt Plantations are at *Pomfret* in *Yorkſhire*, and at *Godliman* in *Surry*, where their Sands and ſandy Loams prove a moſt proper Soil for this Purpoſe; and, if there were many more Plantations of this noble Root, Liquorice would not want a Market, becauſe it is of ſuch univerſal Uſe, that it may be made to ſerve in ſeveral Shapes, and for very valuable Ends. I thought it a pretty Sight to ſee the Sprouts or Shoots of Liquorice about two Feet high, and its Stalks and Leaves grow, on the Tenth of *June* 1738, at *Godliman*, or *Godalmin*, ſo much like a Nurſery of young Aſhes, that it is hard to be diſtinguiſhed by Strangers. Behind the *King's-Head-Inn*, in this Town, there is, at this Time, a fine

fine Liquorice-Plantation, that enjoys ſeveral great Advantages, as, a ſandy Loam, ſituated near the Conveniency of many Dunghils, and a River, in a warm Clime, and near the beſt of Markets, *London*, *&c.* If the Crown-buds and Runners of Liquorice be planted in a ſtiff Soil, they will canker; and, if on a hard Bottom, the Liquorice grows ſtunted and forked: But, in a good ſandy Ground, that has a right Bottom, it will go down five or more Feet deep. Here I was told, that they ſell Off-ſets, at one Shilling a Hundred, and the Liquorice at Six-pence a Pound, becauſe, of late, it had got dearer than formerly; which ſhews what Improvement our true-born *Engliſhmen* have lately made, in the Propagation of Liquorice. But of this, and other Neglects, more hereafter. The freſher and newer the Ground, the better for a Liquorice-Plantation; and, if a good Earth holds but two Feet and a Half, it will do; but not ſo well as three or four Feet deep. Now, to prepare a Manure or Dreſſing for enriching the Earth that is to become a Liquorice-Plantation, there ought to be a good Quantity of rotten Dung mixed with Aſhes, or Lime, or ſome ſuch Compoſt, laid on the Place where the Beds are to be made, in order to rot more, or ferment, till it is deprived of its fermentative Heat, leſt it damage the Buds or Runners; which may, perhaps, be finiſhed in a Month or two. When this is done, the Alleys are to be marked out by a Line, which, with the Liquorice-bed, are to be about three Feet and a Half broad in all, the Alleys included; then a Trench is to be dug between each Alley, wide enough, at leaſt, for a Man to work conveniently in it, and three or four Feet deep; when one Trench is made, the Compoſt, with the Earth, is to be returned into the Trench, and each Alley is to be dug ſeven or eight Inches deep, and the Earth laid over the Trench, or Bed, to raiſe it; and ſo on throughout the Plantation.

In

In the next Place, the Runners are to be provided; and they are thoſe Sprouts which run out from the thick End of the Root, or Crown, towards the Surface, but lie under it, about two Inches, and run three or four Feet long. Theſe Runners, or Sets, being ſmall running Roots, are to be cut into Five-inch Pieces, with two or three Eyes or Joints in each of them; this is one Sort of Sets. The other Sort are the Crown-buds, or Tops, that the Liquorice-roots are cut off from. Being thus furniſhed with Sets, get ready your Beds, each with its Alley, to be a Spade's Breadth for the Weeders to come at to hough and weed the Beds, without Treading. Then, after the Dung is dug in and the Beds are prepared, lay over each either Lime, or Soot, or Peat-aſhes, and dig it in very ſhallow, to ferment; and, in about a Week's Time, when the Fermentation is over, dig the Surface again, ſo that the Bed may lie a little roundiſh in three ſeveral Rows, whereof the Middle of the Bed is to be one, and one on each Side of that, ten or twelve Inches aſunder. Along theſe Rows lay your Sets in Readineſs, at eight Inches Diſtance one from the other; and, when this is done, make a Hole with a Dibber, eight Inches deep, and thruſt one Liquorice-bud to the Bottom of it, which is to be cloſed with Mould on all its Sides and the Top; next follow three Runners, and ſo on, one Bud, and three Runners, or Sets, till all the Beds are finiſhed. Now, to make the moſt of a Liquorice-Plantation, as the Sets may be planted in laſt, or at the Beginning of this Month, in the following Spring-time, you may ſow, over all the Beds, Lettuce, Onions, Carrots, to draw, young Radiſhes, Leeks, or ſuch like Kitchen green Ware: And, when theſe are off, in *July* following, Spinage-ſeed may be ſown to great Advantage, to cut the next Spring, before the Liquorice makes any great Shoots. And, for this Purpoſe, ſome will make their

their Rows of Liquorice eighteen Inches, or two Feet aſunder, in order to ſow and cut Culinary Greens, for two Years together: But, in any Caſe, the Beds muſt be kept thoroughly clean by the Hough or Hand, or both. The Beginning of Winter, at *Godalmin*, they ſpread rotten Dung thinly over their Beds, to keep out the Power of Froſts, and to fertiliſe the Growth of the Liquorice; and, at *Michaelmas*, they cut down its Stalks, or Haulm, that ſometimes grow up to four Feet in Height, the laſt Year, two Feet the ſecond, and one the firſt. The Time of taking up Liquorice is, at *Allhollantide*, and laſts till the latter End of *March*; but the Spring-ſeaſon is rather beſt for this Work; and then they begin digging at the End of a Trench, or Bed, and dig on, in order to take up all the Roots. When all are got up, the great Roots are to be ſeparated from the ſmall ones; and alſo the running Buds and Runners, from the Crown-buds. The former is to be laid in Pit-ſand in a Cellar, a Layer of one and a Layer of the other; but the Crown-buds will do well enough, if laid in a Heap and covered with ſomething dry. The ſooner Liquorice is ſold, the heavier it weighs; and, the greener it is, the more Vertue it contains. One Acre of Ground has yielded, at one Crop, four hundred Stone Weight, which, at three Shillings a Stone, amounts to ſixty Pounds; but, as the Quantity may be more or leſs, and the Price is unfixed, the Sum cannot be aſcertained. However, the great Profit of a Liquorice-Plantation may be eaſily eſtimated; which ought to induce the Owners of ſandy Grounds, or other deep-moulded dry Soils, to make Uſe of theſe Directions, to begin and make Plantations of this noble Root, ſince they may, by this Means, turn their Land to more than treble Advantage to what they make of it now; and that, becauſe the ſame Ground and Place will do

again for a ſecond Crop, if the Earth is well dunged for it; for, if Dung is grudged here, the Crop will certainly complain and diſcover it, becauſe the Liquorice is to get its Nouriſhment, chiefly, from this firſt Dreſſing, for three or four Years together. Accordingly there may be three or four Crops got from the ſame Earth, if rightly managed, that will pay extraordinary well, though three or four Pounds a Year is given for an Acre of Land to plant Liquorice in; as the Price is at *Godalmin*, and in ſome other Places nearer *London*. And, how neceſſary it is to increaſe Plantations of Liquorice, appears by its riſing Market, of late, which, undoubtedly, is owing to two Reaſons: One, becauſe Plantations are not increaſed, in Proportion to the Increaſe of People; the other is, becauſe Liquorice gets more and more into Eſteem, for its medicinal and other Uſes. This Liquorice is ſold, in three ſeveral Shapes, *viz.* in its Roots, in its Powder, and in its Juice; the firſt wants no Explanation, but the ſecond may, which is performed by cutting the ſmaller Liquorice into Bits, and drying them ſufficiently on a Kiln, to grind into Powder, that is thus made ready for Selling in the Apothecary's and other Shops. The third Sort of Liquorice is performed, by maſhing the ſmaller cut Roots, with cold Water; and, after they are pounded and maſhed for near two Days together, the Pulp is to be ſqueeſed, and the Juice boiled up, in a Bloom iron Pot, to a pitchy Subſtance, well known to moſt People by the Name of *Spaniſh* Liquorice. Liquorice-roots will keep a Year together in a Cellar, if laid in Pit-ſand; and, if the Sets, or Runners, and Buds are cut, ready for Planting, they will keep a Fortnight, tied up in Bundles and ſent by Land-carriage; but, if laid in Sand, and ſent by Water-carriage, they will keep ſound three or four Months, eſpecially the more hardy Buds. In

Norfolk

Norfolk and *Suffolk*, are the greateſt Quantities of poor ſandy Grounds that I ever ſaw; and ſo poor, that Thouſands of Acres are put to the Warren-uſe. Here, then, I ſhould think, is great Room for carrying on the Improvement of Liquorice-Plantations, at a cheap Rate, and for making a little Money go a great Way. A Rood of Ground may be planted firſt, which may, perhaps, take up about five thouſand Stock-buds, at five or ſix Shillings a Hundred, and ſixteen thouſand Runners, at three or four Shillings a Hundred; afterwards, from the Increaſe of this, more Sets may be raiſed ſufficient to plant a larger Piece of Ground, and ſo on in the cheapeſt and beſt Manner poſſible to an exceeding great Profit. Thus alſo ſome of thoſe ſandy Lands that lie between *Lenham* and *Ailsford* in *Kent*, and ſome of thoſe ſandy Loams about *Bow*, *Stratford*, *Ilford*, and *Barkin* in *Eſſex*, may be put to this Uſe, and return their Owners, perhaps, more Profit, than their Hops and Potatoes.

CHAP. XIV.

Of the Nature and Miſchief of the Grub-worm.

OF the Breed and Nature of the Grub *or* Canker-worm. This ſtrong, miſchievous Inſect is thought to be blown and bred by the Darr or Oak-bee, becauſe he takes up his Winter Quarters in Holes in the Ground, being of ſo hardy a Nature, that, though he lies near Surface, yet a very ſevere froſty Winter will not kill all of them, as I proved in 1740, when, on the plowing up of one of my Fields in the following Spring, I diſcovered the Truth of what I write. Now theſe Creatures meet with the greateſt Encouragement, from the bad

Huſbandman, to propagate their Species in Meadow-grounds, where the Farmer's Neglect is moſt plainly ſeen; and that is, when Piſſum-banks are ſuffered to increaſe in conſiderable Numbers, for, where theſe are, it is obvious, the Roll has not been employed, nor, very likely, any proper Manure; ſo that theſe Creatures enjoy an uninterrupted Situation to breed and multiply in, as will appear by what I am going to relate.

How a Field was ſpoiled by the Grub.—— In the Pariſh of *Hempſtead*, a Farmer had a four Acre Meadow-field ſo over-run with Moſs and Piſſum-banks, as to produce but a little Graſs, inſomuch that it ſurpriſed the ignorant Farmer, to think, that he ſhould have leſs than his Neighbours every Year; and though he puzzled his Brain, in order to find out the Cauſe, yet he could never diſcover it, till his Hogs became his Counſellors, and ſhewed the Cauſe of the Misfortune; for, being got into the Field, they ſcented the Vermin, and fell to acting the Pioneer, by rooting up the Surface to come at them, with great Eagerneſs. By this Time, the Farmer was convinced how his Meadow became ſpoiled, and then let the Hogs have their full Freedom; who, to enjoy the Grubs, dug almoſt all the Meadow, and devoured the whole Poſſe; many of which were got ſo old, as to be near as thick and as long as a Man's little Finger, having a red Head, a white Body, and many Feet, with a Mouth of two Fangs ſo ſtrong, as to bite a Man's Hand till it bleeds, as has been proved by this Farmer's Son and others.

Of Ways and Means to prevent the Damage of the Grub.—The foregoing Caſe certainly brings the Farmer under juſt Blame, for ſuffering theſe Creatures to reign ſo long before they were deſtroyed; for, if he had, firſt of all, cut up the Mole or Piſſum-banks, the Roll would have had Room to work,

work, for, by drawing the Roll over a Meadow, the Beginning of *March*, it ſo cloſes the Ground as to check the Power and Breed of thoſe Inſects; for, if they are put to it for Room to lie on their Backs (as their common Poſture is) and gnaw the Roots of the Graſs, they cannot do that Damage as when they have full Room. But this will not do alone. There ſhould be Soot applied to the Quantity of twenty Buſhels on an Acre, which if ſown over the Meadow in the Month of *January*, as a Manure, or forty Buſhels of Coal-aſhes on the ſame Quantity of Ground, there is no great Danger of the Grub's Damage, for the Bitterneſs of the Soot, and the ſulphureous and ſaline Nature of the Aſhes, are ſo contrary to the Nature of theſe Creatures, that, if they are all duly applied, they will ſurely prevent and overcome the Breed of theſe Ravagers; whereas common rotted Horſes, Cows, Aſſes, or Swine-dung are of ſuch a mild and nouriſhing Nature, as to become rather a Food, or delicate Subſiſtence, to theſe Creatures than a Bane; as may be plainly perceived, when ſuch Dungs are left behind Animals in Fields, which are ſo agreeable to Inſects, as to invite them to the Place. But, whether they are moſtly invited by the Smell, Sight, or Taſte of theſe Dungs, or their waſhed-in Juices, I cannot determine; only this I know, that, where theſe Excrements lie, there Flies, Worms, *&c.* are commonly found in the warm Seaſons, and, no Wonder, ſince ſuch Excrements are produced by the ſweet Juices of Graſſes, or by the balſamic, nouriſhing Qualities of the Corn they eat; with this Exception, that the Dungs of Sheep, Rabbits, and Fowls ought not to be ranked in the Number of Dungs that breed or feed Inſects: Becauſe, in the firſt Place, Sheep are Creatures that ſeldom, nay, many Thouſands of them, never drink any Water throughout the Year; and, becauſe it is thought the

the Moiſtneſs of their continual green Food and the Poroſity of their Skins, in a great Meaſure, ſupply the Want of it. Indeed, it is certain, that this Animal has the moſt porous Skin of all other Quadrupeds, through which the Moiſture of the Air and Rains may probably enter and contribute to the Satisfying of their Drought, and conſequently cauſe their Dung and Urine to be ſo much the ranker and ſtronger, and more diſagreeable to the Grub-worm and other Inſects; as evidently appears from the Uſe of the Fold, for, wherever the Fold is clapped over new ſown Turnep-ſeed, to fertiliſe the Ground and promote a vigorous Vegetation, there, I ſay, the Slug, Grub, or Worm ſeldom, or never, hurts the Crop. I have likewiſe almoſt the ſame to write of Rabbit-dung, which is ſo efficacious and fertile, that it is ſold for Six-pence a Buſhel; becauſe, as theſe Animals never drink Water, their Dung and Stale proceed only from what they eat, which gives their Urine and Dung ſuch a ſtrong, rank Smell and Taſte, as makes them be loathed by Grubs, Worms, and other Inſects, with great Abhorrence. *Laſtly*, The Pigeon, Turkey, Gooſe, Pheaſant, Dunghil-cock, and Hen-dung, *&c.* are, all of them, endued with ſuch ſulphureous and ſaline Qualities; and the more, if they are fed with Corn, and, of all Corn, none produces ſuch a fertile Quality in Dung, as the Horſe-bean; that the Meadow or plowed Ground, on which theſe Fowl-Dungs are laid, will, in a great Meaſure, be prevented from breeding Grubs, Worms, *&c.*

CHAP.

CHAP. XV.

Of Manures *and* Dreſſings *for Vale-Grounds.*

OF Manures *and* Dreſſings *for ſowing Wheat in* Ayleſbury *Vale.* Manures and Dreſſings very much differ, in their Nature and Application to Vale and *Chilturn* Lands; the Sort, which ſuits one Soil, may not anſwer upon another; from whence many fatal Miſtakes in Huſbandry have taken their Riſe, and that not only by applying a wrong Sort to a particular Earth, but likewiſe by wrong timing it, as I ſhall by and by make appear. In the Vale of *Aylesbury*, their Land, for the moſt Part, is a rich Sort, being a Compoſition of a bluiſh Clay mixed with black Mould, that lies ſo low, as to oblige the Farmer to lay all his plowed Ground in Ridge-lands of an Acre, or Half an Acre Extent, that lie in this Poſture, without any Alteration, becauſe their Lying high, in the Ridge-faſhion, very much delivers their Corn from the Power of Waters, that would otherwiſe chill and kill it; and yet it often happens, that Floods are ſo increaſed as to drown a fourth Part of theſe Ridge-lands, and ſpoil the Crop, as far as the Waters lie; and the more, where ſuch Lands are poorly dreſſed. A full Manure, or Dreſſing, is, therefore, here more than ordinary neceſſary: For which Purpoſe they make Uſe of Stable, Cow-houſe, Hog's-ſty, Pigeon-houſe, and Hen-houſe Dungs, as lying too far off the great Conveniency of *London*, for bringing down Dreſſings from thence by Land-carriage, which moſt do, in our Parts, that live within thirty Miles of *London*. In *Aylesbury* Vale they, therefore, diligently, but very imprudently, preſerve their Stable, Cow-houſe, and Hog's-ſty Dungs, becauſe they will not ſo much as ſpare any for the Uſe of a Garden,

Garden, leſt it rob the Field: Imprudently, becauſe I never knew any of theſe Vale-farmers, but what let all their long Dung lie about the Farm-yard under Cows and Hogs Feet, expoſed great Part of the Winter and Spring to the Waſh of the Rains, that certainly carries off very much of its Quinteſſence or Vertue into Ditches or Ponds, and from thence I, nor, perhaps, they themſelves know where; for, when theſe Ponds, Ditches, or other Receptacles, have received the black Water, and overflow, they loſe much of their Settlements, and in Summer many of them are dried up; ſo that, according to what I have obſerved in ſeveral large Farm-yards, I think, I may ſay, thoſe Tenants have loſt near a fourth Part of the Goodneſs of their Dungs, before they have been laid on their Fallow-grounds. Now there are two Ways commonly made Uſe of by Vale-farmers in the Management of their Dung: One is, in the Months of *April*, or *May*, to clamp and throw up the Dung in the Farm-yard into ſeveral Heaps or ſquare Parcels, for it to lie and rot againſt Stirree-time; that is, juſt before the ſecond Plowing or firſt Stirree, they carry it out, and ſpread it all over thoſe Lands that are to be ſown with Wheat, the Beginning of this Month, and plow it in, in order to get it thoroughly mixed with the Earth; for, by ſo doing, they get their clung, heavy Land into a looſe hollow Condition, which gives the Plough-ſhare an eaſy Entrance, bringing this ſurly Glebe into ſuch a porous fine Body, as obliges it to receive and lodge great Quantities of the moſt fertile Dreſſing in the World: The Nitrous Dews. And it is by ſuch early plowing in their rotten Dung, that they prevent, in a great Degree, the Cankering and Smuttineſs of their Wheat; which is a moſt ruinous Diſeaſe, cauſing the Farmer ſometimes to ſell this Grain for one Shilling leſs in a Buſhel, than his Neighbours do their

their better ſounder Sort, as was by ſome Hundreds of Tenants wofully experienced in the Years 1740 and 1741. The other Way is done thus: As ſoon as they have ſowed all their Barley, Beans, Peaſe, Thetches, or other *Lent* Grain, and their Cows are turned out to Graſs, they begin to carry out their Stable, Cow-houſe, Hog's-ſty, and Yard long Dungs, and lay them on a Head-land, near to that Part in the common Field, where their Wheat-ſeed is to be ſown in this Month, which is generally ſo contrived, as to be the Ground that lies remoteſt from the Farm-houſe; and this, becauſe, in the Carrying of ſuch Dungs, it is in their Power to forbear ſuch Work, till dry Weather favours their Deſign; and then their Carts are drawn, as we call it, *on the Nail*, without damaging their arable Lands, which they are obliged, ſometimes, to go over; or over their rutty, uneven By-roads and Lanes, that in wet Seaſons are unpaſſable with Wheel-carriages; and, when they have carried enough out to make a Clamp, or Dunghil, they pare off ſome Turf or other Earth, and lay over the Top of the ſame, to prevent the ill Conſequences of its being too much dried by the Wind and Sun. In this Poſture each Dunghil lies till juſt before the laſt Plowing for ſowing their Wheat-ſeed, and then they carry and ſhoot it out of Carts in ſmall Heaps, and ſpread it all over the Land, which, when done, they ſow their Wheat-ſeed and plow all in together with their Broad-ſhared Foot-plough, and then the Plowing, Dunging, and Sowing-part is all finiſhed for that Seaſon. There is alſo a third Way too much practiſed by bad Husbandmen, and is done either through Neceſſity or Neglect. If by the Firſt, they ſay in Defence of this Miſmanagement, that they could not get Dung enough all the Winter and Spring-ſeaſons, to lay on their Fallow-ground in due Time, and thus plead a Neceſſity for their late

Laying on their raw undigeſted Dung, juſt before the laſt Plowing for Wheat. But ſuch Farmers, in Courſe, meet with thin Crops of Corn, and a thick Crop of Weeds; for, if ſuch raw Dungs have not a requiſite Time to ferment and burn up the Seeds of Weeds which muſt neceſſarily accompany them, they will in Courſe ſhew their ill Effects by the firſt warm Weather that happens in the following Spring; and then enſue the great Charge and Damage of Weeding, and the Ground ſo hurt by it, that the next Bean, Pea, or Oat-crop, muſt certainly very much ſuffer; beſides the Loſs that ſuch crude Dung may bring on the preſent Wheat-crop, which under ſuch ill Huſbandry ſeldom eſcapes the ſmutty or Pepper-wheat Diſeaſe; a Misfortune ſo dreaded by Thouſands, that, to avoid it, they never dung their Land the ſame Summer they ſow it with Wheat, but lay their Muck, or, as many call it, their *Compoſt* on their Ground, juſt before they plow and ſow it with Horſe-beans, or Oats.

Of Manures and Dreſſings made Uſe of for a Wheat-crop in the Vale-lands of Beaver. The Practice of Manuring, Dreſſing, and Plowing many of their open common Field Lands, lying here, I am going to ſhew, becauſe, though their Ground is ſituated as low as thoſe in *Aylesbury* Vale, yet there is a conſiderable Difference in their Management. Many of theſe Farmers may be called good Huſbandmen, and it concerns them to be ſo, as they pay Seven Shillings and Six-pence an Acre for their arable Ground, that lies in Ridges and Furrows and like thoſe in *Aylesbury* Vale is never plowed a-croſs; but then they enjoy ſome of the beſt of Ground, for there is hardly any exceeds it for producing large Crops of Wheat, Barley, and Peaſe, *&c.* as being for the moſt Part red, clayey and gravelly Loams, which lie in Rood and Half-acre Lands, that they dreſs and manure with Dung, with the Fold, and with Lime, *&c.*

for

for a Wheat-crop, with rotten Dung; and then they plow it in at the firſt Stirree-time, and ſeldom or never juſt before the laſt Plowing, becauſe here their Soils are very apt to breed ſmutty Wheat; others mix Highway-dirt or any other Rubbiſh with their Dung, and, after it is well prepared, lay it on their Wheat-land. A certain Gentleman, in this Country, was ſo curious a Huſbandman, as to collect Ant-hills, Tanners-bark after its being made Uſe of and done with by the Tanner, and Privy-dung, and with his Stable-dung made a Compoſt, which he would let lie in a great Heap, or Dunghil, ſome Time, till he had it turned; and this he did twice or thrice, till he had kept it a Year or more, and made it all ſo fine, that it would paſs through the large wired Screen; when it was thus got ready, he applied ſome of it to his Garden Uſe, and ſome to the Field Uſe; if to the Latter, it was carried in a Cart, and, when on the Spot of Ground, they threw it out, by ſpreading it over the Land with a Shovel, and then ſowed and plowed in the Grain. As to the Fold, there are hardly any but great Farmers, that employ one, and that a little one, becauſe, this being a flattiſh, wettiſh, open Field Country, the Sheep here are very ſubject to the Rot; and, therefore, if a Farmer has not the Conveniency of Shifting them in Meadow-ground, or on plowed Lands that lie dry (which few ſmall Farmers have) the Loſs may be more than the Profit. There were very few Sheep killed by the Butcher in the dry Year of 1742, but what had been formerly touched with the Rot, as appeared by their hard cory Liver; elſe this Field-dreſſing would be of excellent Uſe here, as agreeing very well with their Sort of Soil. But their Lime is uſed in general, and anſwers exceeding well on their gravelly Loams and gravelly Clays, contrary to thoſe ridge, loamy, clayey Lands in *Aylesbury* Vale, which

being of a ſtiffer Nature, and lying higher, do not ſuit this Sort of Dreſſing, nor did I ever ſee any make Uſe of Lime in this Vale; although a great Deal may be ſaid on Account of Prejudice, which not a little governs the Countryman, as is obvious by the Non-uſe of Lime, in the large open Fields of *Piſtone*, near *Ivinghoe*, where they have Hundreds of Acres of gravelly, loamy Land, that would rightly agree with the Lime Improvement, and yet pay no Regard to the great Opportunity they may enjoy of making Lime at a cheap Rate, becauſe, under all their Surface, they have a chalky Bottom: But, inſtead of Lime, they go ſometimes ten or more Miles, to buy and fetch Rags Home at a much dearer Rate. But this Vale-farmer is wiſer for liming his Land, as I ſhall ſhew, by and by, when I write more particularly on Lime; in the mean While, I muſt here obſerve, that in *July*, or *Auguſt*, they take Care to lay on the juſt Quantity of two Quarters and a Half upon each half Acre Ridge-land, in little Heaps, over the whole Land, to lie and ſlake, till all is ready to be ſpreaded, and then to be plowed in at the ſecond Stirree-time. Others lay a whole Waggon-load of Lime, which is five Quarters, in one Heap, on a Land, to lie a Month or more, to ſlake and crumble by the Weather, and, when ready, they carry it in a little low Cart, and by a Shovel take it out and ſpread it over two half Acre Lands, which, after having been plowed in twice or more, they ſow and plow in their Wheat-ſeed in this Month, and then they ridge up their Land, contrary to the Vale of *Aylesbury* Practice, for here they always caſt down their Land at Sowing-time. Some of theſe Farmers will alſo lime and dung their Land the ſame Year, which, being a double Dreſſing, generally returns them prodigious Crops of Wheat and *Lent*-grain. Some few alſo make Uſe of Coal-ſoot, by ſowing it over their

their Wheat, about *Candlemas*; and, as their Ridge-lands lie broad and flattiſh, it is not ſoon waſhed off them, but often does a great Service, by forcing on a ſtrong and quick Growth of their Wheat.

CHAP. XVI.

Of Manures *and* Dreſſings *for* Chilturn *Lands.*

OF *Manures and Dreſſings for improving Wheat-Crops in the* Chilturn *Country.* There are many Sorts of theſe made Uſe of for the Improvement of Crops in *Chilturn* Earths, which do not ſuit Vale-land; for, though, in the Vale common Fields, their Farmers employ the Fold, Pigeon-dung, Yard-dung, Scouring of Ditches, *&c.* yet in the *Chilturn*, or drier hilly Country, they conſume great Quantities of theſe and many other Sorts of Manures and Dreſſings, as, Horn-ſhavings, Glovers-ſhavings, Sheep-trotters, Hogs and Cows Hooves and Hair, Hens and Rabbit-dung, Peat, Coal, and Wood-aſhes, Pitch-brands, Sprats, Rags, Chalk, Lime, Oil-cake Powder, Malt-duſt, *&c.* which I ſhall give very particular Accounts of, as follows, *viz.*

The Nature and Uſe of Horn and Glovers Shavings. —This Manure is taken Notice of by *Houghton*, *Worlige*, and many other Authors, who all write in great Praiſe of them. One ſays, that, in the Year 1694, Horn-ſhavings were then ſold, in *London*, for Eight Shillings and Six Pence a Quarter Sack, and that five ſuch Sacks, ſtrewed and ſcattered in Furrows, before the Plough, at *Michaelmas*, will very much improve two Acres of Land ſown with Wheat-ſeed; but do little, or no Service to hot Ground. Accordingly, he ſays, when he was a Boy, and now was above ſixty Years of Age, he knew a wet, cold Place, of ſix or ſeven Acres of Ground, that had ſixteen Sacks of theſe Shavings ſtrewed on it,

it, and it brought Corn, plentifully, for four Years together, and that then, being laid down with Graſs-ſeed, it brought forth very good Graſs, and continues ſo ſtill; that the Number of Horners were then twenty-four, who made each of them above twenty Sacks a Year. But this Account is not ſufficient, to inſtruct an ignorant Farmer in the right Uſe of this beneficial Dreſſing, or durable Manure; and, therefore, I ſhall endeavour to carry on this Subject a little farther, and ſhew a larger and more particular Uſe of Horn-ſhavings. Of theſe there are two Sorts ſold by the Horners in *London*, or thoſe who, out of Ox's, Cows, and Bull's Horns, make Combs, Inkhorns, and a hundred other Sorts of Utenſils and Knick-knacks, moſt of whom live in *Petticoat-lane*, near *Whitechappel* in *London*. The ſmall Sort of Horn-ſhavings are thoſe commonly made by the Inkhorn-makers, who ſell them, for about eleven Shillings, a Quarter-ſack, and two Sacks ſow an Acre. The large Sort are eight Shillings a Quarter-ſack, and two and a Half of them ſow an Acre; but the ſmall Sort are reckoned the cheapeſt, becauſe they go a great deal the fartheſt, by lying cloſer and covering the more Ground. Both theſe are, by ſome, thought not to be ſo proper a Manure for wet as for dry Land, becauſe the larger Sort, eſpecially, is apt to hold Water, and chill the Roots of Wheat in ſuch wet Ground, to its Damage; but where the Earth lies dry, either in Vale or *Chilturn* Lands, they are a moſt excellent Manure, and will do great Service, for ſeveral Years. In our *Chilturn*, gravelly, and other dry Soils, we uſe them in this Manner: If Wheat-ſeed is to be ſown in four Thorough ſtitches, or what may be called *two Bout-lands*, after all the Ground is harrowed plain, Horn or Glovers Shavings are to be ſown over all the Land; and then Wheat-ſeed muſt be plowed and ſowed in with them,

them, which, in this Posture, will greatly nourish the Corn, and keep it warm in Winter, and moist in Summer. This Operation is to be performed in the stiffer, dryish Soils; but, if Wheat-seed is to be sown in gravelly Soils Broad-cast, or on any dry Loams, then the Shavings are to be sown thus: When all the Ground is harrowed plain, and ready for the last Plowing, sow your Shavings on the Top of it, and plow them in as shallow as possible; then sow your Wheat-seed Broad-cast, and harrow it in, and the Harrow will tear and raise up the Shavings towards the Surface, and mix them with the Seed. If your Shavings are to be sown on a chalky Land, and your Wheat is to be sown in the same Broad-cast, sow your Shavings on the Top, immediately sow your Wheat-seed, and, with a Foot or Swing-plough, plow all in together, but do not harrow any more. Thus I have made known the three several Ways, at this Time, made Use of in *Chilturn* Countries, for sowing and employing those Shavings; and I am farther to observe, as was before remarked, that these Shavings, contrary to what some old Authors have advanced, are generally allowed to agree best with Gravels and dry, sandy, and stony Loams, because, as they are of a spungy Nature, and receive and retain Water, they will continue in the Ground so a long Time, keep such Land in a moist Condition, and nourish the Corn in the driest Seasons. And, besides all this, there is another extraordinary good Property belonging to them; and that is, these Shavings being of a tough Nature, the hungry Quality of sharp and stony Gravels and Sands cannot easily waste their Substance, in a little Time, as they do Stable-dungs, and powdered Manures; and, therefore, in many Places, they are preferred, as the best of Manures. If you are to sow Wheat-seed on one Plowing up of Turnep ground, and your

Soil

Soil is a looſe Loam, or ſuch like, you may ſow your Shavings and Seed, and plow both in together; or, as I ſaid, you may firſt plow the Shavings in, and then harrow in your Wheat-ſeed; for, in this Shape of Management, the Shavings will riſe, in ſome Degree, towards the Surface, and not deſcend from the Corn-roots: But take Notice, that you are not to expect ſo much from the Shavings, the firſt Year, as they will yield afterwards, becauſe they will not be rotted, till the Second; and then and two Years after, or more, they will add an exceeding Fertility to the Ground.

The Nature and Uſe of Woollen Rags.—Theſe Rags are a moſt excellent Dreſſing for all Chalks, chalky, ſandy, and gravelly Loams, and ſuch like dry Earths; and the more ſo, as they come from Places where they uſe much Oil, or Greaſe, in the Woollen Buſineſs; for nothing gives a greater Fertility to the Earth, than thoſe Things that abound with a nitrous or unctuous Quality. For this Reaſon it is, that ſome of the better Sort of Farmers, in our Parts, fetch their Woollen Rags from about *Newport-Pagnel*, in *Northamptonſhire*, which lies about twelve Miles from their own Home, and think it good Huſbandry to go ſo far, with a Waggon and five or ſix Horſes. Others bring them in their Return from *London*, by Way of Back-carriage; that is, after the Farmer has carried up to *London* ſome Corn, Meal, or Chaff, he loads back with Rags, though he brings them thirty Miles. Others, and in the moſt general Way, buy their Woollen Rags ready brought down to *Hempſtead*, twenty-two Miles from *London*, by the Return of the common Road-waggons, and load them in their own Waggon, as ſoon as they have delivered their Grain at Market. Now, what I would obſerve from this is, that Woollen Rags get more and more into Uſe; and that the Rags, made in the Country, are

are more preferable, for the Farmer's Uſe, than the drier and cleaner *London* Woollen Rags. Mr. *Worlige*, who is allowed to be a celebrated Author, gives no more than the following Account of Rags: ——"In Rags of all Sorts, there is good Vertue; "they are carried far, and laid upon Land, and "have them in a warming and improving Tem-"per; one good Load will go as far as a dozen, "or more, of Cow-dung."——But I muſt farther write, that the moſt general Way of uſing Woollen Rags is thus: When your Chalk, chalky Loam, ſandy Loam, or other dry Soil, fit for this Purpoſe, is harrowed plain, ready for ſowing and plowing in Wheat-ſeed, then empty eight Sacks of chopped Rags on one Broad-land Acre, each Sack containing fifty-ſix Pounds Weight, and each Sackful to lie in one Heap, at ſome Diſtance from another. When this is done, let a Man fill a Seed-cot with them, and ſow the Rags Broad-caſt with his Hand over the Ground, and ſo on, till the Surface of the Acre is covered; then let a Man directly ſow his Wheat-ſeed, out of a Seed-cot, all over the ſame Land, and plow both Rags and Wheat-ſeed in together, with a Foot, Swing, Jockey, or Wood-chip Plough, for all theſe go with a broad Socket-ſhare, adapted to the Purpoſe of plowing in Grain very ſhallow. Thus one Acre of Land is finiſhed; and, in ſo doing, you will experience, that no Manure ſuits theſe Soils better than Woollen Rags; for theſe will, in ſome Degree, become ſo many Watering-pots to ſuch dry Earths, in the Summer-time, and, in the Winter, ſo warm the Roots of the Wheat, as to keep off the Power of Froſts and Chills of Waters.

Cows and Hogs-hair, their beneficial Uſes in nouriſhing Wheat and other Crops.—Both Cows and Hogs-hair are certainly of the ſame Nature with the Blood, Fleſh, and Hide of the Creatures they are

taken from; and, I preſume, this Nature, or Quality, is of the oily and ſulphureous Kind, and conſequently deſerves to be ranked amongſt the beſt of fertile Dreſſings and Manures for Land. This Quality, being lodged in the Hair and Briſtles of the Beaſts, is, by its fine, ſtiff, and thready Parts, made capable of uniting with the Earth, in a little Time; and more ſo, when its Subſtance becomes rotted, for then it eaſily incorporates with the ſmall Particles of the Mould, which it ſticks to, and thus laſts two, three, or more Years, before the Hair, or Briſtles, are intirely conſumed and waſted. In the mean Time, they readily adminiſter their balſamic, fruitful Aſſiſtance to all Corn, Graſs, Trees, and other Vegetables, that are ſown and planted among their nouriſhing Influences. And this they do with more Expedition, than Shavings, Trotters, Hooves, Rags, or any other of the more ſubſtantial and tougher Dreſſings. In ſhort, by our yearly Experience, we find Cows-hair and Hogs-briſtles to be as fertile Manures, as any other Sort whatſoever, for the Time they laſt, by their yielding a quick, warm, and moiſt Nouriſhment to the Land they are ſown on; ſo that, if they are rightly ſown and mixed with the Earth, the Roots of Vegetables preſently meet their Aſſiſtance, and then they bring on their luxurious Growth; for, as Lord *Bacon* writes in his *Sylva*, at Page 78, "Water and Oil "are the two principal Materials of Vegetables." Yet, notwithſtanding the Goodneſs and Value of this excellent Manure, it may, like a Joint of Meat ſpoiled, in its Dreſſing, by an ignorant Cook, be ſo ill managed by the Farmer, as to bring him under a Loſs rather than Profit; to prevent which, I ſhall here give my Reader an Account of a Caſe relating to the ſame, that he, by other Mens Harm, may learn to beware; which is as follows, *viz.*

How

How a Gentleman, by wrong Application of Hair to his Land, ſuſtained a conſiderable Loſs, ſeveral Years together.—This Gentleman, who lives about twenty-five Miles from *London*, and is better acquainted in another Art that he profeſſes and is maintained by, than in Husbandry, was ſo much bigotted to his own Notions, as to refuſe all Advice, in this Reſpect; which led him into the great Miſtake I am going to ſhew, which was this: By his living ſo near *London*, where the greateſt Quantities of the Hair of Beaſts are to be bought, he was tempted to ſend his Team for ſo much of it, that he laid it almoſt as thick as we do our common Dung. The Conſequence of this imprudent Management was, that the great Quantity of this rich Manure burnt up the Roots of the Wheat and other After-crops, and cauſed bulky Crops of Weeds to grow in their Place, for ſeveral Years together; which plainly diſcovers the great Neceſſity there is of Book-inſtructions, when they proceed from Facts, that teach Men oftentimes, by the Coſt and Experience of others, the true Way of ſaving Charge, and increaſing Wealth; and this, by adjuſting the Quantity of Manures and Seeds, the right Time, and the proper Land, they are to be applied to. The Truth of this I ſhall further illuſtrate, by an Example of the judicious Management of an *Hertfordſhire* Farmer, as follows, *viz.*

How an Hertfordſhire *Farmer, by a right Application of Hair to his Land, got great Crops of Corn, for ſeveral Years together.*—The Farmer, I am now writing of, living near *Hempſtead* in *Hertfordſhire*, by the Return of his Waggon from *London*, brought down as much Hogs-hair, as he gave thirty Shillings for, being allowed the Privilege of loading and carrying away as much as he poſſibly could, for that Money, in the wet Condition the Hair was then in; and it was ſo wet, that the Water drained

from it, more or leſs, all the Way he came; yet, having ſix ſtout Horſes in his Team, he brought home as much as well dreſſed two Acres of gravelly Ground, that before had, by ſeveral Plowings, been prepared and got into a fine Tilth. Then, as ſoon as he had ſowed the Hogs-hair, and plowed it thinly in, he ſowed Turnep-ſeed all over the Land, and harrowed it in; which produced a prodigious Crop of Turneps, that were fed off with Sheep betimes. Their being ſo early fed off gave this Farmer an Opportunity, on only one Plowing, to ſow the Ground all over with Wheat-ſeed; and he had the biggeſt Crops of Wheat and other Grain, that were ſown in the ſame Field, ſeveral Years afterwards. Yet I would here be underſtood, when I ſay, *for ſeveral Years afterwards*, for about four Years in all, with a little other Aſſiſtance; for Hair is a light Manure, in Conſideration of Hooves, Horns, Rags, and other of the tougher Sorts, and will be ſooner, or later, conſumed, as the Earth it is applied to is leaner or fatter, ſtiffer or lighter. When Cows, or Hogs-hair, is bought of the Tanner, or Butcher, it is commonly ſold for eight Pence a Buſhel; and twenty Buſhels, ſcattered over one Acre of Land, will be ſufficient for any Crop that is to grow in the ſame.

The Hooves of Cows or Oxen, their durable and fertile Dreſſing of hungry Soils.— They are bought, in ſome Places, for one Shilling a Buſhel, and, according to the old Way of Management, are to be chopped into ſmall Bits, and ſcattered over the Land, on the laſt Plowing but one, and then immediately plowed into two Bout-lands with the Wheat-ſeed: Or they may be ſowed on the rough Ground, as the laſt Plowing left it, in Broad-lands, and the Wheat-ſeed harrowed in them: Or the Bits of Hooves may be plowed in, at Stirree-time, in Bouts: Or they may be ſown on the Broad-lands, with Wheat-

ſeed,

ſeed, and then both may be plowed in together. Fifteen Buſhels, chopped ſmall, ſow an Acre. But the new Way of managing theſe Hooves is thus performed: As ſoon as the Wheat-ſeed is harrowed, or plowed, in Broad-lands, at a Foot Diſtance, force each whole Hoof erect into the Ground with a Stick, ſo that the broad Part remain uppermoſt for the Rain to fill them; and then, in Time, they will rot and diffuſe the beſt of Dreſſing to the Land, by the Running over Water, which proceeds from the Putrefaction of thoſe Hooves, that will ſoak in and moiſten all the Roots of the Wheat, though the Hooves lie, at twelve Inches Diſtance from each other, juſt covered by Earth. The Wheat, in this Poſture, is ſecured from being devoured by Dogs, Foxes, wild and Pole-cats, Kanes, Weaſles, and Stoats: And, when theſe Hooves are plowed up afterwards, and thereby expoſed to Field-vermin, yet will they remain in a ſafe Condition, becauſe they become ſo rotten, by that Time, as to be refuſed by ſuch voracious Animals. Hooves are ſuch a durable Manure and Dreſſing, that they will laſt well ſix Years, and, being of a very tough Body and oily Nature, they are moſt proper to be applied to gravelly, ſtony, ſandy, and chalky Soils, where they will prove ſo many little Watering-pots, or Receptacles, to ſuch dry Grounds, and exceedingly nouriſh them. Now, to this my Account, I ſhall ſubjoin that of another, who ſays, "That "Hooves are of the Nature of Hair and Horn, "for the Dreſſing of Land, if chopped to Pieces "and ſowed on the dry Land; which makes it "fruitful, for three Years, and does vaſt Service, "and ſo on, if repeated; it is now, ſays he, the "Cuſtom to dreſs the Land with Horn and Woollen-"rags. Hooves are excellent Fewel to harden "Iron, and the Tripe-folk often burn them under "their Copper, to ſave Coals; they are ſold from

"Twelve-

" Twelve-pence to Eighteen-pence a Buſhel, and " are often ſet on Sticks in Gardens, to catch Ear- " wigs." —— Now, how ſhould a young Farmer, or other Novice; or a Landlord that may voluntarily, for Pleaſure, Profit, or his Health, or, by being neceſſitated to ſeize for Rent, be obliged to take one or more Farms into his own Hands; know how to improve his Eſtate, by ſuch a ſhort and general Way of Writing? So that it may plainly appear, by this and many other Inſtances, that it was high Time for me, or ſome other Perſon, to employ our Pens in diſcovering the Nature of different Manures, their Quantity, and other of their Properties, which has not been ſufficiently done before.

Dreſſing Land with Blood.— It is recorded that, after the Battle of *Badnam* in *Devonſhire*, won by Lord *Hopton*, the Blood of the Slain did ſo fertiliſe the Fields wherein Corn had been ſown a little before, that the Year following produced ſo extraordinary a Crop, that moſt of the Wheat-ſtalks bore from two to fourteen Ears: The Owner, by reaſon of its being trod down, thought to reſow it but was diſſuaded; and it happened as above.— Now to remark on this, I have to write, that, as to, the Dreſſing of Land, this Way, by Blood, God forbid it ſhould ever happen again; but, as all Blood is of an oily Nature, and abounds with the greateſt Store of Salts, it is certainly one of the richeſt Dreſſings in the World, as is annually proved by the Dunghils of Butchers, which generally produce the greateſt Crops of Corn and Graſs; and it is for this Reaſon, that we frequently apply the Blood of Beaſts to the Roots of Trees, and their Increaſe of Growth, in Wood and Fruit, ſhews the great Fertility of this Sort of Dreſſing.

The Benefits of dreſſing Land with Lime, for improving a Wheat-crop.— This Sort of Dreſſing agrees beſt with ſandy and gravelly Loams, and other light Earths, becauſe

becauſe Lime will not be ſo ſoon chilled, nor waſhed away, here as it would be, if ſown on Clays, or wettiſh Lands; for Lime is a cold Manure, after the Fire is out of it; however, where it is laid on in a good Quantity, I have known it do Good on a ſtiff and moiſt Loams. Lime, in different Places, is attended with different Management. In *Surry*, they lay one Buſhel on a Heap taken out of a low Cart, and this at every Pole-diſtance throughout a Field; and, when ſlaked by the Weather, with a Shovel, they throw it over the Land, plow it in, and then directly harrow in their Wheat-ſeed on the ſame. Or, when the Ground is plowed and harrowed, the laſt Time but one, the Lime may be ſown and plowed in with Wheat-ſeed in two Boutlands: Or, when the Lime is ſown in a little Quantity, as that of ſixty Buſhels on one Acre, when it is ſlaked, the Lime and Seed may be plowed in together in Broad-lands, and it will nouriſh two Crops well. But, in ſome Parts of this Country, they lay on a whole Kiln of Lime on three Acres, containing nine Loads, and each Load forty Buſhels; which, with ſome alternate Dreſſings of Dung, or other Sorts, will laſt ten Years; for this Sort of Manure greatly hollows the Ground, cauſes Wheat to kern, ſweetens the Land, and kills Weeds and Inſects. On the fourth Day of *Auguſt*, 1738, I ſaw a large Field juſt plowed up and rolled in *Surry*; and then Half a Buſhel of Lime was laid, at every Pole-diſtance, in Rows throughout the ſame, for ſowing Wheat. Some let Lime lie, till it is ſlaked, before they throw it about with a Spade, or Shovel; others put a little Mould over the Tops of the Heap, for the more gradual Slaking it. About *Godilman* in *Surry*, they lime for common Wheat, *French* Wheat, Barley, and Peaſe, by firſt Shooting down a Cart-load in one Heap before Sowing, and let it lie a Week, two, three,

or

or more, to ſlake, according as the Weather is; for a ſmall Rain ſhuts it, but a great one ſlakes it. When this is done, they draw it about in a leſſer low Cart, and a Man, with a Shovel, takes the ſlaked Lime out, and ſtrews it over the vacant Ground, till all the Field is covered with it; then they harrow it in, for the preſent, to keep the Winds from blowing it away. After this, they give the Land one Plowing, and harrow in their Wheat-ſeed, which, in their ſandy Loams, is preſently mixed with the Lime, that is raiſed to the Seed by the Harrow-tines; but, if this Work is deferred, till late in *October*, and the Rains fall in Plenty, the Lime is apt to burn the Horſes Feet. Here they are of Opinion, that Lime does little or no Good on ſpringy, low, and ſtiff Land; yet, where Clays lie not very low, and are not attended with the Riſe of Springs, it may be of Service; but ſandy and dry Loams, they believe, receive the greateſt Benefits from Lime. One of their Farmers told me, that he knew Lime once ſown by the Hand out of a Seed-cot; but it is not practiſed here.

The Benefit of dreſſing Land for a Wheat-crop, by plowing in Clover.—This Piece of Huſbandry is not in general Practice, becauſe a good Crop of Clover, ſometimes, pays the Farmer near as well as a Crop of Wheat; and therefore it diſcourages a Farmer to put it to the Uſe of ſupplying Dung, or Manure. However, where a good Crop of Clover grows on a gravelly Soil, it anſwers beſt of any where to plow it in, for harrowing Wheat-ſeed on the ſame Land; becauſe, a Gravel being of a looſe and hungry Nature, and the Clover of a bulky and tough Body, it will remain in this Earth ſome Time, before its Subſtance can be conſumed, and, by this Means, adminiſter ſuch a Fertility to the Roots of Wheat, as to produce a great Crop. This Piece of Huſbandry is more practiſed, about *Harrow-on-the-Hill*, than I ever

ever knew in any Place beſides; and here they do it in their ſmall pebbly and gravelly Ground, which is reckoned to be one of the pooreſt Soils in the Kingdom. After the Clover is plowed in, it ought to lie a few Days, to ferment; and, when the Fermentation is over, the Wheat-ſeed may be harrowed in, for, if the Seed was to be harrowed in directly, it may canker or burn up the Roots of Wheat, to the Deſtruction of the Crop.

The Benefit of dreſſing Land for a common Wheat-crop, by the Plowing in of French *Wheat.*—This is a very ſerviceable Invention for ſaving the great Charge of dreſſing Land with Dung, or Manure; and it is ſtill of greater Service, where no other Dreſſing, or Manure, can be conveniently come at. For this Purpoſe, light and dry Lands are the moſt proper of all others; as, Sands, Gravels, Chalks, and their Loams, which, with good Management, may be prodigiouſly aſſiſted, by the Plowing in of a Crop of *French* Wheat. This profitable Husbandry has even tempted ſome Farmers to ſow and get Crops of *French* Wheat in their gravelly Grounds, near *Poplar* and *Bow* in *Eſſex*, about four or five Miles diſtant from *London*; where it has anſwered well to dreſs their hungry Gravels with this *French* Wheat, by plowing it in at a right Time, and in a right Manner; but not ſo well as in ſome Parts of *Norfolk* and *Suffolk* in their ſandy Lands, becauſe, in theſe latter Places, Manures and Dreſſings are very difficult and chargeable to come by, when thoſe Grounds, lying near *London*, may be ſupplied at an eaſier and cheaper Rate. Now there are ſeveral Ways to dreſs and fertiliſe the Earth by *French* Wheat: One Way is to draw a Roll by one or two Horſes over the Crop of *French* Wheat, when it is got into full Bloom; for, if this Work is deferred later, the Seed may be ſo ripe as to furniſh the Ground, and grow a Year, or two, afterwards, to the Damage of the firſt and ſecond Crops of Grain. Thus,

when the *French* Wheat is laid flat, the Plough may be worked to turn the Stalk into the Ground; and, if any appear that are not buried, there is a very convenient Inſtrument to be made Uſe of, that I have deſcribed in the Month of *July*, at Page 53, which will turn them in very cleverly; and, for your farther Information, I refer you to the Chapter wrote *on* French *Wheat* in that Month, wherein I have amply treated on the great Service the Plowing in of this Vegetable is of, to the fertilifing a Crop of common Wheat.

An Account of the good Husbandry of the Kentiſh *Farmer, in making a Compoſt to dreſs his Land for a Wheat-crop.*—In *Kent*, *Surry*, *Eſſex*, and ſome Parts of *Middleſex*, but moſt of all in *Kent*, they are very careful, and even make Uſe of all Opportunities, during the Summer-ſeaſon, to collect ſeveral Sorts of Ingredients, for making a Compoſt to dreſs their Ground for a Wheat-crop and others; and, for this Purpoſe, they clean out all Ponds and Ditches that they can, to come by Mud and Sullidge; and ſo diligent are theſe Farmers, in the Queſt of ſuch Ingredients, that they dig up all ſuperfluous Surfaces, eſpecially thoſe that lie under the Drip of Trees, or Hedges, where nothing can grow to Profit. Thus, wherever they can dig a Range of Mould that can be ſpared, they fail not to do it, and make theſe Ingredients by a due Mixture of them with Chalk, or Lime, and Dung, to ſerve inſtead of Marle; and, when by Time, and ſeveral Turnings, they are brought into a fine Body, they may be made to anſwer as well as ſome Sort of that, which is called *the beſt Dreſſing*; and, that it may anſwer this their good Purpoſe, when they dig up Mould under Hedges, they lay it in a narrow Range about a Yard wide at Bottom, and on that put a Range of Dung, and another of ſmall Chalk, for, with the largeſt Chalk they make Lime. Theſe, after they have been incorporated and lain together,

ſome

ſome Time, they dig, ſhovel, and turn it into a new Range, or Heap; and ſo again, till all becomes very fine, and into what they call a *Compoſt*. Others will lay a Range of theſe Ingredients, in the Width of ſix or eight Feet, or more, and make ſuch a Range, ſometimes, contain an hundred Loads of Compoſt, more or leſs: But the *Middleſex* Men commonly incorporate all theſe together in a long and ſquare Clamp, or Dunghil, and peck and turn it, till they get the Whole very fine; for, the finer it is, the farther it will go, and do the greater Service, by its fine Particles mixing with the capillary thready Roots of the Corn, or Graſs. Others, inſtead of ſmall Chalk, make Uſe of Lime, as being by far the better Sort, for making coarſe Mould run fine, and killing the Seeds of Weeds, and the Weeds of Twitch-graſs, Thiſtles, and others of that pernicious Tribe; then, in laſt or this Month, they carry it about in a little low Cart, and ſhoot it down in Heaps, which they ſpread all over the Field, for improving a Wheat-crop, that is to be ſown, in the Manner I have before directed. But there are others, that will not make Uſe of any Dung, or Compoſt, whatſoever, for improving a Wheat-crop, but plow the Compoſt in about *Chriſtmas*, in order to nouriſh a Bean or Pea-crop, and never dreſs the Ground, in the leaſt, for Wheat, becauſe they fear it will breed Smut and Weeds, to the great Prejudice of that fine and moſt uſeful Grain. On the Contrary, they truſt to the Quinteſſence and Goodneſs of the Compoſt that was employed for the Growth of Beans or Peaſe to nouriſh the Wheat-crop; and this it never fails to do, when the Bean or Pea-crop is a full one, as being one of that Sort which kills Weeds, and rather inriches than impoveriſhes the Ground; and it is by this Means, that they are ſeldom, or never, troubled with a ſmutty Crop of Wheat, or, indeed, a bad

one by other Incidents. But the Benefit of dreſſing Ground with ſuch a Compoſt, for a Bean and Wheat-crop, is ſtill farther increaſed, when the Horſe-break and Hand-hough are employed, in laying up the Mould of the Intervals to the Bean-roots, according to the Method I have before deſcribed; for then the Beans are nouriſhed, and the Weeds killed, in the higheſt Perfection; to which I have to add, that, if the Wheat-crop, which preſently ſucceeds that of the Beans, is ſown by the three-wheel Drill-plough, and the Intervals are houghed with the *Dutch* Hand-hough, the Wheat ſtands the beſt Chance, of all others, to be one of the greateſt Crops that is, as I have, in my former Works, more fully explained. Theſe Lines, then, may juſtly upbraid all thoſe Farmers, who ſeldom, or never, employ any other Dreſſing than Dung, and are ſo indiſcreet, as to uſe it directly out of the Farm-yard, for nouriſhing a Wheat-crop; as, to my Knowledge, many do, both in Vale and *Chilturn* Countries, and thereby incur the Damage of ſmutty or Pepper-wheat, the Growth of Weeds, and the Sourneſs of their Ground. But they are certainly the beſt Husbandmen who firſt clamp and rot their Dung, and lay it on for improving a Bean-crop, and not directly for a Wheat-crop; though there is Room for an Objection, even againſt this Practice, where they ſow Wheat in common Fields, becauſe here the Bean-crop follows that of the Wheat; yet, if they could break through an old and wrong Cuſtom, they would certainly find a great Advantage by it. And this I have ſo ſay, in Praiſe of ſome of the *Middleſex* Farmers, about *Harrow*, *Stanmore*, and the adjacent Parts, who make it their Buſineſs to get a great deal of Sullidge out of the Bottom of Drains in Roads, Commons, and other Places, which they here call a *Mine*; for, with this Sort and the Emptyings of Ponds and Ditches, they

mix

mix *London* Dung, *London* Dirt, and ſmall Chalk mix ſome fetch, above five Miles an End, from *Watford*; which, after two or three Turnings with ſome Coal-aſhes among it, becomes an excellent Compoſt for Graſs or Meadow Ground, as well as ploughed Land. The Benefits of this Huſbandry are too many to be enumerated here, and, therefore, I ſhall only hint that, if Ground is got into good Heart, by being thus well dreſſed with a ſweet, ſtrong, and fine Compoſt, the leſs and eaſier Plowings will better anſwer the Farmer's End, than more, and harder, without ſuch improved Compoſt-dreſſing; becauſe it makes the Earth plow and harrow much eaſier, and finer, than otherwiſe it would.

The Nature and profitable Uſes of Soap-aſhes, for improving a Crop of Wheat, &c.— Soap-aſhes are thoſe made only by Soap-boilers, which are of a white Colour, of a Mortar-conſiſtence, and of a warm Quality; becauſe they are made from the warm Parts of Pot-aſh, Lime, and Oil, or Tallow, being the groſs Matter ſeparated from them, which cauſes them to appear like Mortar. In this Condition, they are ſold, at *London*, by the Cart-load, and chiefly bought up by the *Middleſex* Plough-farmer, who mixes them with Dung and Earth; and, after the Compoſt is duly turned and rotted into fine Particles, it is carried and laid upon the Ground in little Heaps, the latter End of laſt, or the Beginning of this Month, and then ſpread thinly over it, for being plowed in with Wheat-ſeed into three and four Bout-lands; and it is an excellent Dreſſing for warming and ſhortening their ſtiff, low, watery Earths, for theſe Soap-aſhes are of ſo hot a Nature, that, if they were to be ſpread over Land directly as they are brought from *London*, and the Wheat-ſeed ſown forthwith, they would, in Courſe, burn its Roots and deſtroy the Crop; which is prevented

vented by the Fermentation the Aſhes go through in the Heap, or Dunghil; and, as theſe Aſhes are thought to be an Alcali, they very probably imbibe the Nitre, or Spirit of the Air, which the Dews and Rains diſſolve, and carry it with them into the Earth and Seeds, and ſo fructify them, as to cauſe their great Improvement in the ſucceeding Crop of Wheat. In ſhort, theſe Aſhes are accounted the very beſt Dreſſing for Corn the *Middleſex* Farmer enjoys; and, indeed, they may be made to be of the like Uſe to any other Farmer in their Application to lighter and drier Soils, if the Soap-aſhes be firſt diveſted of their natural fiery Heat; which is eaſily done by mixing them with other Ingredients, and giving them Time enough to ferment, as I ſaid before, in a compoſed Heap, or Dunghil.

Curious Obſervations on the Dreſſing of plowed Ground with Horſe-dung, &c. for increaſing a Crop of Wheat.—Although I have wrote, in ſeveral of my Books, on the Nature and Service of Horſe and other Dungs, as they relate to the Increaſing of Wheat-Crops; yet, by what I have written and am to write, it may be plainly perceived, that no one Author can hardly be ſuppoſed to be capable of writing an intire Syſtem of Huſbandry; that is, a compleat Treatiſe of its Art: Becauſe the Science or Knowledge of Huſbandry is ſo copious, in the Practice of many of its Branches, in innumerable Parts of this Kingdom, that, I ſuppoſe, it cannot be learned by any one Man; and by reaſon of its Variableneſs and being ſubject to frequent Changes of Management, in which this is one of its material Articles, and, therefore, requires the beſt of Information. He is certainly a good Huſbandman, who endeavours to dung his Land all alike for a Wheat-crop; and yet it is ſeldom done. I know but one Farmer, in all our Country, that is thoroughly nice, in this Point; and he is ſo careful, that, after his Servant has

has ſpread it over the Ground ready for plowing it in, he goes himſelf, and, where he finds a Clot bigger than ordinary, pulls it in Pieces with his Hands, and diſperſes it about, in ſmaller Parts, as equally as he can. In like Manner, when rotten Dung is plowed in Broad-lands, or into two or three Bout-lands, and after the Wheat-ſeed is ſown, he walks over his Field, and, where he ſees a Piece of Dung, as it were, ſtare up above the Earth, he draws and ſpreads it; and, for this Purpoſe, he ſometimes takes four or five Men with him, in order to prevent the Smothering and Burying of the Wheat-ſeed, by ſuch Clots or Pieces of the Dung, that, in this Poſture, may alſo nouriſh ſome Kernels very much, while others are intirely deprived of any Part of its beneficial Aſſiſtance. Beſides, if Dung, either long, or ſhort, is laid on Land in very great Quantities (eſpecially Horſe-dung) juſt before Wheat is ſown, it will burn or canker the Roots of it, and very likely breed more or leſs, ſmutty or Pepper-wheat; or cauſe the Wheat-crop to be ſo rank as to fall down before Harveſt, whereby oftentimes a poor lean Kernel is bred to the Loſs of Half or three Parts of a Crop of Wheat, as I am going to prove by the Example of a Gentleman's Miſmanagement, *viz.*

How a Gentleman, by laying on Stable-dung in too great a Quantity, had commonly the worſt of Crops.—I know a Gentleman that, to make a great deal of Dung, buys many Loads of Wheat-ſtraw of his neighbouring Farmers, for littering his Saddle, Coach, and Cart-horſes, his Swine, and other Beaſts; and thus he makes great Quantities for dreſſing his plowed Grounds. This, being alſo laid on in great Quantities, cauſes his Wheat and Barley-crops to be commonly laid flat, before Harveſt, and to produce lean half Kernels, but abundance of Straw; ſo that it is juſtly remarked of this Gentleman, that,

if

if he gave Half his Dung away, every Year, he would have had better Crops of Grain; for, under ſuch exceſſive Dreſſing, he had not a right Crop, above once, in ſix Years: And that was, when moſt of the Wheat, or Barley, miſſed by very ſevere, froſty, and wet Seaſons, as it happened in that rigid Winter and Spring 1740, when the ſame Gentleman had more Grain, than any of his Neighbours; becauſe the frigid Air ſo checked the Heat of the Dung, as to keep it in a modetate Degree of acting, whereby the Wheat and Barley-crops ſtood upright, at Harveſt, and returned him the greateſt Plenty.

How a Publican, by his Dogs-dung, gets greater Crops of Wheat, and other Grain, than his Neighbours.—Dogs-dung is often experienced and found to be the moſt fertile Dreſſing of all the quadruped Sorts; as is alſo beſt known to thoſe Gentlemen who keep a Kennel of Hounds, and employ their Dung in plowed Lands. At *Dagnal* in *Bedfordſhire*, there lives a Publican, who is Gamekeeper to a Gentleman, which obliges him to keep a Number of Setting-dogs and Spaniels, that return him a conſiderable Quantity of Dung, in a Year; and, as this Man is Owner of a ſingle Acre of Land near his Houſe, he dreſſes it with his Dogs-dung, every Year; which helps him to ſuch Crops of Wheat, Barley, Beans, and Peaſe, as excel thoſe of the neighbouring Farmers, and theſe on a gravelly Soil. But, what is moſt to be admired, this Man gets, by the Richneſs of his Dogs-dung, Crops of Corn, every Year, without the Interval of a fallow one, though he ſows his Seed in the promiſcuous, old, *Virgilian* Way; and, in the dry and exceſſive cold Spring of 1740, when moſt Crops of Beans ſuffered by it, this Man's Crop looked freſh, and went on ſo well, that, at Harveſt, he had the beſt of Crops, as I and many more beheld with Admiration.

The

The Nature and Cure of Cow-dung, for causing it to improve Crops of Wheat. Cow-dung, of itself, is the worst Dung that is, to endure Wets; as being of a most spungy, soft, and hollow Nature; and, therefore, whenever a Person's Conveniency will allow of it, it is best kept under Cover and managed, as I am going to shew: This Dung I mix with my short Horse-dung, and keep both under Cover, every now and then mixing some Ashes with them, and throwing Chamberly on all, as often as the Maid empties her Pots. This is my constant Practice; and it is farther improved by the Addition of my Cocks and Hens Dung, that roost over it. This is an exceeding good Compost, which, if timely turned and well mixed, will certainly improve Crops of Wheat, and Grass, to a great Degree; and, for making it go the fartheſt, I have it sown by a Man's Hand out of a Seed-cot, who spreads it over the new-sown Wheat, and it seldom fails of answering the desired End.

How a Gentleman, in Aylesbury *Vale, improved the Dung and Litter of his Stable.*— A Gentleman, that here kept his Farm in his own Hands, for his Health and Diversion, had a large Hole in the Ground by his Stable, that would hold near twenty Loads of Dung; into this Hole ran the Stale of all his Horses, and the Drain of the Farm-yard; and into this Hole he laid all his Horse-dung and the Litter of the Stable, to soak and lie a Month or six Weeks, for, by that Time, it would be full. Then he had it carried out and laid in a Heap, or Clamp, with some Mould over its Top, to keep the Sun from drying it too soon and too much; and so on by farther Additions, till he had a very great Dunghil. Now this Hole was so valuable in the Gentleman's Esteem, that he was wont to say, he had rather see it full of black Water than strong Drink; because the Litter and Dung, by lying in it, became so impregnated with the Urine of Beasts, that, when it had lain on a dry Piece of Ground some Time, it would ferment and

quickly rot into a ſhort Body, and become an excellent Dreſſing for his plowed Grounds, eſpecially when the Orts of his Bean-ſtraw, which fell from the Rack, were made Part of his Litter, and thus ſoaked.

To increaſe a Crop of Wheat by the Fold. — This Dreſſing is the moſt univerſal Sort of all others, becauſe it ſuits with the Nature of Vale, ſtiff, wet, as well as with *Chilturn*, ſhort, dry Land; and this more or leſs, according to the Time of Year the Folding is performed. If it is done for a Turnep-crop, the Fold doth great Service in the Beginning of the Summer; becauſe the Sheep's Dung then does not lie long on the Ground, before it is plowed into the Earth, for nouriſhing the Turnep-ſeed that may be ſown in *May*, or *June*; but, if the Fold is employed on the fallow Ground for a Wheat-crop, the forward Folding does little Good, and the latter a great Deal, by reaſon the Dung then does not lie long enough to have its Goodneſs exhauſted by the Sun and Air, or ſpent by the Attraction of the Earth. We, therefore, account Folding between *Midſummer* and *Allhollantide* to do the greater Service to a Wheat-crop; and, accordingly, we increaſe the Width of our Fold in the latter Part of the Summer, becauſe one Night's Folding then goes as far as two in the former. But we carry this Piece of Huſbandry farther, by Folding, in the *Chilturn* Country eſpecially, on our new-ſown Wheat; and, if the Ground is not too ſtiff and wet, it will do very great Service, not only by enriching the Land with the Dung and Stale of the Sheep, and by their lying on it with their oily Coats, but alſo by their treading in the Seed, and faſtening the Earth about the Kernel's Body. This Sort of Improvement is of the greater Value, when it is performed on Wheat-ſeed harrowed on a Clover, or other Graſs Lay, or when a Pea, Bean,

or

or Barley-ſtubble is plowed up, and Wheat-ſeed is harrowed into the ſame: But more of this in next Month, wherein I ſhall finiſh the Chapter of *Manures* and *Dreſſings* for *Chilturn* Lands, as not having Room to enlarge further in this Place, though it is a Subject that might well fill an intire Book, if a full Diſcourſe was written on its many Branches and Benefits; for it is a Maxim in Huſbandry, Without Dreſſing or Manuring, there is no ſuch Thing as Farming to any Purpoſe or Advantage.

CHAP. XVII.

Of SHEEP.

OF Sheep, *and their Improvement.* — Now the greateſt Care is neceſſary in the looking after Sheep, to prevent their taking in the Cauſe of the Rot and red or white Water, and dying by them hereafter, and alſo for preventing their being taken with the Gripes or other Maladies, that Sheep are more than ordinary ſubject to at this Time; becauſe, in this Month, it often happens that great Rains fall, and make the flaſhy Graſs lodge a crude and unwholeſome Water in their porous Bodies, that in Thouſands of Sheep in ſome Seaſons bring on the Rot, or red or white Water, to their Deſtruction. It would, therefore, be prudent Management in all Farmers to keep their Sheep well in the foregoing Summer, by accuſtoming them to baiting every Day more or leſs in Clover, or other artificial Graſs; for, when Sheep are all at once brought to feed on a plentiful Bite, they feed ſo greedily as to occaſion the Beginning of theſe Diſeaſes. Hence it is, that the good Huſbandry of ſowing Clover, Trefoil, or Ray-graſs for the Feeding of Sheep, by Way of baiting for Folding, took its Riſe, and is now much practiſed by the better

Sort of Husbandmen, who do not account it any Prejudice to sow and feed artificial Grasses in this Manner; as some argue it is, because, say they, the Growth of Corn in the same Ground would turn to more Profit. But this is certainly a wrong Plea; for these Farmers generally contrive to sow their artificial Grass-seeds among Oats, Pease, or Beans, that they may enjoy their Clover-crop in the Fallow-season, when the Ground would be otherwise idle: Or, if they sow their Clover, Trefoil, or Ray-grass, among their Wheat or Barley, it is rather more advantageous in some Respects, because the Land, for these Crops, seldom goes without a plentiful Dressing or Manuring; and then so much of such Manuring or Dressing, as remains behind in the Earth, serves to bring on a more forward and fuller Crop of such artificial Grass, than when their Seeds are sown among Oats, Pease, or Beans; to the Saving of the great Charge of buying Coal-ashes, Soot, or laying on Dung or other expensive Assistance, which many do, after Clover, *&c.* are sown among Oats, or such other *Lent* Grain. Now also take Care to give some of my Antidotes, that I have made known in former Months, to your Folding-sheep, for preventing the Rot, red or white Water, *&c.* always remembering that Prevention is better than Remedy; and this will keep your Sheep in Health in the worst of Weather. Of all these Antidotes there is none exceeds the Goodness of that mentioned in the 142d Page of my *May* Book, which is so efficacious, if rightly applied, that, I am sure it will prevent those fatal Diseases of the Rot, or Waters; but then such an Antidote must not be used by Halves; that is, by giving it only once in two or three Months. No, the Remedy is to be proportioned to the Danger; one Dose sometimes, in moderate Weather, will go as far as two in worse,

But

But there is very commonly a lamentable Objection made againſt this Practice by almoſt every Shepherd, who, in Courſe, to ſave their Labour, will inveigh againſt any new Remedy, as an inſipid Innovation, and very likely plead: Such a Man tried a Thing, and it did no Good; and, therefore, pray, Maſter, don't go upon new Whimſies. This is the common Lirry; and ſo prevalent are the frivolous Arguments of theſe ignorant Boobies, that they, for the moſt Part, preſently prevail with their Maſters, not to adventure any Thing out of the old, common, beaten Path, and ſo miſs of a Prevention for ſaving the Lives of, perhaps, one or more Flocks of Sheep. But that late worthy ingenious Member of Parliament for *Bridgwater* in *Somerſetſhire* (whoſe Loſs I heard mightily regretted by the Inhabitants of this large Town, when I was there in 1737.) —— *Palmer*, Eſq; would not be thus chouſed out of his Reaſon, but ſo maintained it againſt his Servants and all others, that he obliged his Shepherd to try the Experiment of my Regulus of Antimony Receipt, mentioned in my *Practical Farmer*, on his large Flock of Sheep; and it ſo effectually anſwered his Expectation, that (as he believed) it ſaved them from that moſt deſtructive Rot which happened in 1735, as he declared, for I had it from his own Mouth.

The Advantages accruing to a Farmer, by the buying in of Welch *Sheep.* — Theſe are the moſt hardy Sort of all others, as being bred on the ſhort Bite of the cold *Welch* Mountains, but carry a coarſe Wool on their Backs. However, there are ſeveral Conveniencies attend the buying in of theſe Sheep: For, *firſt*, they will live on the leaſt Meat, and yet will leave a greater Quantity of Dung in the Fold than others, in Proportion to their Bigneſs. *Secondly*, they are generally perfectly ſound. *Thirdly*, they will ſtand the Severity of Weather beyond all others.

others. *Fourthly*, they will quickly fat. *Fifthly*, if a Rot ſhould overtake them, the Loſs of one of theſe may not be half the Value of the greater Sort; but, if a Farmer can foreſee a Rot coming on, he may preſently fat them, and ſell them for as much, or more, perhaps, than their prime Coſt; and the better, as the leſſer Mutton is now much in Requeſt with the Gentry, who eſteem it beyond the larger and more ſpungy Sort, and becauſe they can more conveniently enjoy a freſh Joint of this than the other. The Price theſe *Welch* Sheep are generally ſold at, is about five or ſix Shillings a-piece; and they may be bought on the Northern Road, in this and the laſt Month, when they are commonly drove up in large Flocks to ſell in the more Southern Parts of *England*. But one Thing I muſt forewarn my Reader of, and that is to take Care he is not bit in purchaſing theſe *Welch* Sheep, and try to know if they are not ſurfeited by long Driving; which is a Diſtemper ſo incident to all Sheep coming from a great Diſtance, that many have loſt almoſt their whole Flock by it. I knew a Gentleman, who, at his firſt Setting up the Huſbandry-Buſineſs, by taking a conſiderable Quantity of Land in his Hands, thought to ſave a great Deal by ſending his Bailiff into the North to buy Sheep; and, accordingly, he bought a great Number; but he would never do ſo again, becauſe they were ſo ſurfeited by indiſcreet and long Driving, that a great many of them died, to his no little Loſs. Open, therefore, and part their Wool, and ſee if their Skin is no Way ſcabby, or, if it has not an inflamed Appearance in it; though, I muſt confeſs, when the Diſtemper is very young, they may be infected, and yet not to be diſcovered by any outward Symptoms; and then their Buying is a Lottery, as moſt other Things are, eſpecially in the Farming-Buſineſs; on which Account, a Gentleman's

tleman's Servant ought to be one of experienced Skill, as I ſhall more particularly obſerve hereafter.

CHAP. XVIII.

Of TYTHES.

THE following Account of Tythes come to my Hands, by means of a great Diſpute that happened between a Miniſter in *Hertfordſhire* and a Farmer his Pariſhioner, who, from a trifling Cauſe at firſt, carried on the Matter ſo far, that a Tryal commenced before the Barons of the Exchequer, which terminated almoſt to the Ruin of the Farmer, and to the great Expence of the Miniſter, who, though he got the Advantage at Law, yet run out a conſiderable Sum of Money by the Farmer's Breaking, and getting his Perſon protected by a Statute of Bankrupcy; I ſay; the Copy of the following Queries and Anſwers being obtained by the Farmer for his Inſtructions, I got the Opportunity of writing out another by it, which, as it was given under the Hand of that eminent learned Counſellor in the Law Sir *Conſtantine Phipps*, I ſuppoſe it may be depended on as true; the Perſon, whom it was writ firſt for, living in the Pariſh of St. *Peter*'s, in the Town of St. *Alban*'s, in the County of *Hertford*, 1720.

Query One.—Tythe-Milk; whether the Pariſhioners are obliged to carry the ſame to the Vicar, or, whether the Vicar is not obliged to ſend for the ſame to the Pariſhioners Places of Habitation?

Anſwer.—I conceive the Pariſhioners are not obliged to carry their ſmall Tythes to the Vicar, but he is obliged to fetch them.

Query

Query Two. — Tythe-Calves; how the Tythe of Calves is to be paid to the Vicar, if bought and ſuckled, or Home-bred?

Anſwer. — For Calves that fall in the Pariſh, the Tenth is due for Tythes, unleſs there be a particular Cuſtom for Tything the Calves in the Pariſh; but for Calves bought and ſuckled no Tythes are due.

Query Three. —How the Tythes of dry Cows of the Farmer's own, and Cows and Horſes of others taken in to winter with Hay and Straw, is to be paid to the Vicar, or any Tythes due?

Anſwer. — If the Farmers own Cows and Horſes, and other Perſons, are only fed in Winter upon Hay and Straw, and not grazed, I am of Opinion no Tythes are due: But, if they are grazed at all, Tythes muſt be paid for ſuch Grazing after the Rate of Two Shillings in the Pound, according to the Value of the Herbage.

Query Four.—Whether Sheep and Lambs bought in and killed in the Farmer's own Houſe, in a little Time after ſo bought, ought to pay Tythes, and in what Manner, if any?

Anſwer. — I am of Opinion that Sheep and Lambs, bought in and killed in the Farmer's own Houſe, ought to pay Tythes for the Time they were fed in the Pariſh, after the Rate of Two Shillings in the Pound for the Value of the Herbage, unleſs there is a particular Cuſtom in the Pariſh for the Payment of Tythes for the Depaſture of Sheep.

Query Five. — How Lambs bred and fattened, or kept for Stores, ought to pay Tythes, and at what Age they are to be tythed?

Anſwer. — I am of Opinion that Tythes ought to be paid for Lambs bred and fattened, or for Stores, and that ſuch Lambs are tytheable, when they are able to live without the Ewes.

Query

Query Sixth.—How Pigs are to be tythed, and at what Age, and out of what Number the Vicar can claim or demand one?

Anſwer.— Pigs are tytheable when they can live without the Sow, and the Vicar is intitled to one in Ten, unleſs by the Cuſtom of the Pariſh there be any other particular Way of tything Pigs.

Query Seventh. — Whether the Vicar can take Tythe-Eggs and Tythe-Chickens both at one Time, the Chickens coming out of the Eggs that were tythed before?

Anſwer. — I am of Opinion, if the Vicar take Tythe-Eggs, he is not intitled to the Tythe of Chickens coming out of thoſe Eggs which he had tythed.

Query Eighth. — Whether the Vicar can take Tythe for the Farmer's own Horſes, which they plough and ſow and fill their Land with?

Anſwer. — Tythes are not due for Horſes uſed for the Plough, or the Farmer's own Uſe on his own Farm in the ſame Pariſh.

Query Ninth. — Whether the Pariſhioners are bound to houſe the Fruit, when gathered for the Vicar, or ſet them out on the Ground where they are gathered? If loſt by the Vicar's Neglect of ſending for them; whether the Vicar ſhall bear the Loſs?

Anſwer. — I am of Opinion the Pariſhioners are not bound to houſe the Tythe-Fruit, but the Tythe-Fruit ought to be ſet out on the Ground. But Notice ought to be given to the Vicar, when the Fruit is gathered; and, if it be ſpoiled by Reaſon of his not fetching away his Tythes in due Time, he muſt bear the Loſs.

Query Tenth.—Whether Turneps which fattened Sheep ought to pay Tythes, when the ſaid Sheep have paid Tythe-Wool before, or eaten with Store-

Sheep and Lambs, that will pay Tythe-Wool afterwards?

Anſwer. — If Turneps are drawn and afterwards eaten by Sheep, Tythes are due for ſuch Turneps. But, if the Turneps are not drawn but eaten upon the Ground, no Tythes are due for ſuch Turneps, but only a Tythe-Herbage for ſuch Sheep as are not ſhorn, nor have any Lambs in the Pariſh.

Query Eleventh.—What Tythes of Pigeons are due to the Vicar *from* thoſe that keep them, and rent Dove-houſes?

Anſwer. — Tythes are due for young Pigeons, and the Vicar is intitled to the Tenth of the Value, if they are ſold.

Query Twelfth.—Whether Meadow Lands, that have paid Tythe Graſs to another Perſon, ought to pay Tythes again for the After-paſture to the Vicar for the ſame Year?

Anſwer. — I am of Opinion, that the Occupier, having paid Tythes to the Rector for the Hay, ought not to pay Tythes for the Agiſtment of Cattle to the Vicar for the After-paſture in the ſame Year.

CONSTANTINE PHIPPS.

THE Pariſh of *South Mimms*, in the County of *Middleſex*, not having at any Time paid their ſmall Vicarial Tythes in Kind, but a Rate of Threepence *per* Pound inſtead thereof, and the preſent Vicar inſiſting for the Future to take the ſame in Kind, they deſire to be informed in the Method and Manner the Law preſcribes in the Payment of the ſame; whereas, in this Caſe, there is no Cuſtom to guide them in any of the Particulars.

Query Firſt.—How the Tythes for the Depaſturing of barren Cattle is to be paid, whether according to the Value of the Ground, or the Tenth Penny

Penny for which ſuch Cattle is ſold; and if in the laſt Caſe, if the prime Coſt is to be deducted, and whether it is to be paid according to the Proportion of Time ſuch Cattle feed thereon, and how ſuch Proportion is to be made, or if the Vicar is in any Caſe intitled to a Tenth Penny, unleſs by Cuſtom?

Anſwer. — If the Occupier of the Land takes in Cattle of others to agiſt, the Tenth Part of the Money received (as I take it) is payable for Agiſtment: For his own Cattle fed thereon, Tythes are to be paid according to the Value of the Land, after the Rate of Two Shillings in the Pound for the Tenth of the Value of the Feeding; to be eſtimated for the Time they ſhall be fed. But I know of no ſuch Rule of paying of the Tenth Penny of what ſuch Cattle is ſold for.

Query Second. — If a Ground be eaten with profitable, as alſo with barren or unprofitable Cattle; if the greater Part of ſuch Cattle being unprofitable ſhall free the reſt?

Anſwer. — Tythe muſt be paid for the Unprofitable, and the Profitable will not exempt the reſt.

Query Third. — If any Tythes are to be paid for After-paſture, Fallow or Corn-Stubbles, or for any Cattle or fattened Oxen, or the like to be fed thereon, or for the Milk of Milch-Cows while they go on ſuch After-paſture, Fallow, or Corn-Stubble?

Anſwer. — Of common Right no Tythes are to be paid for Cattle fed on After-paſture, Fallow, or Stubbles; but the Milk of Cows, being a different Increaſe, will be payable, while they go on ſuch After-paſture, Fallow, or Corn-Stubble.

Query Fourth. — Whether barren Cattle are fed partly on After-paſture, or partly on Paſture-Ground, how the Tythe of ſuch Cattle is to be paid?

Anſwer. — Tythes are to be paid for the Time they feed on Paſture-Ground, and it is the Pariſhioners Intereſt, who claim any Diſcharge, to diſtinguiſh how long they were fed on ſuch Ground, and how long on the After-paſture.

Query Fifth.—If any Tythes be paid for Milk of Cows, while each Cow feeds on Hay, which before hath paid Tythe to the Impropriator, or for Oxen fattened on ſuch Hay only?

Anſwer. — I have no Doubt but Tythe muſt be paid of the Milk of ſuch Cows, the Milk, as I have before obſerved, being a different Increaſe; but I do not well conceive what Tythe can be paid for Oxen, which are only fattened with Hay.

Query Sixth. — Where barren Cattle are fed on common Ground, if the Tythe is to be paid to the Pariſh where ſuch Common lies, or to the Pariſh where the Owner lives?

Anſwer. — Cattle feeding on common or waſte Ground, whereof the Pariſh is not certainly known, are by expreſs Proviſion by Statute of 2 *Eliz.* 6th, to pay Tythes to the Pariſh where the Owner dwells; but I think it is otherwiſe where the Pariſh is certainly known.

Query Seventh.—If any Tythe is to be paid for Cattle killed and eaten in the Houſe, or for the Milk of Cows eaten in the Houſe?

Anſwer. — In my Opinion this Circumſtance alone will not carry any Exemption.

Query Eighth.—How the Tythe of Milk is to be paid, whether every Tenth Part of every Time of Milking, or every Tenth Meal or Milking? And if obliged to give Notice every Time of Milking conſtantly every Day, at ſuch a Time or Hour, is ſufficient? And, if the Tythe of Milk be not fetched away by the Vicar, what is to be done with it?

Anſwer. — It has been adjudged, that of common Right the Tenth Meal ought to be ſet out by the

the Pariſhioner at the common Milking-Place, and though I think the Law does not require Notice of the Setting out, yet, as to Fetching it away, I think it neceſſary to render the Vicar inexcuſable.

Query Ninth.—Where Milch-Cows feed partly in one Pariſh, and are milked only in one Pariſh, if the Tythe of the Milk is to be paid only in that Pariſh where they are milked, or otherwiſe?

Anſwer.—I think the Tythe-milk ought to be paid to each Pariſh, for the Time the Cows are fed there.

Query Tenth.—When the Tythe of Lambs, Pigs, and Calves, *&c.* is to be paid, if the Pariſhioner hath not ten Lambs, *&c.* in one Year, are any Tythes to be paid; and as the Cuſtom of the Pariſh is to ſuckle all their Lambs, till fat and ſaleable, if, in this Caſe, the Vicar can oblige the Pariſhioner to pay Tythe for the Lambs, when they are ſuckled and fit for Market; or the Tenth-penny when ſold, or only as they fall and are able to live without the Dam?

Anſwer.—I take it, that of common Right they are tytheable, when weanable, and they can live without the Dam. If fewer than Ten, the Tenth Part of the Value at ſuch Time is to be paid.

Query Eleventh.—Whether any Tythes are due for Lambs that fall before *Lady-day* next, from which Time the Vicar hath given Notice to take his Tythes in Kind?

Anſwer.—If there hath been a running Compoſition, which hath included all Sorts of Tythes, I apprehend that no Tythes will be due for Lambs that fall before *Lady-day* next, from which Time the Vicar hath given Notice to take his Tythes in Kind.

Query Twelfth.—Where Ewes are brought from one Pariſh to another ready to lamb, or Ewes having juſt lambed with their Lambs; if any Tythes be due to the Vicar for ſuch Lambs not fallen in the Pariſh,

Pariſh, or for Lambs fallen from ſuch Ewes that have fed altogether in another Pariſh?

Query Thirteenth.—Whether, a Pariſhioner taking Graſs for a Month or two in another Pariſh for Ewes ready to lamb and fall there, if the Vicar of the Pariſh from whence ſuch Ewes come, and where the Owner lived, ſhall have the Tythe of ſuch Lambs?

Query Fourteenth.—When Ewes feed partly in one Pariſh and partly in another, and the Lambs fall, and the Sheep are ſhorn in one Pariſh only, if the Tythe of the Lambs and Wool is to be paid only to that Pariſh where the Sheep are ſhorn and the Lambs fall?

Query Fifteenth.—Whether Deer or Conies in a Park, which the Occupier rents and makes Profit of the ſame Deer and Conies by Sale, pay any, or what Tythes?

Anſwer.—Of common Right no Tythes are due for Deer or Conies, and I do not know of any Authority in Law that alters the Rule, though Profit be made of them by Sale.

Query Sixteenth.—If Underwood, that is uſed only in Fewel for the Houſe and in Fencing the Ground, pay any Tythe; or, whether the ſame made into Faggots and ſold pays to the Vicar; and how and whether the Tythes of Willows, Haſles, Birch, Elder, Thorn, *&c.* are Vicarial Tythes?

Anſwer.—Underwood ſo uſed is looked upon to be diſcharged from Payment of Tythes, either *per Legem Terræ*, or by Preſcription: But, made into Faggots and ſold, is tytheable. But, as Wood is eſteemed a great Tythe, I apprehend, without Uſage to the Contrary, it is payable to the Impropriator, not to the Vicar.

Query Seventeenth.—If Turneps are Vicarial Tythes, and if any Turneps be due where it is a ſecond Crop of the Ground that hath paid Tythe before, or where they are eaten by profitable Cattle?

Anſwer.

Anſwer.— Turneps are eſteemed a ſmall Tythe, and may, as ſuch, be payable to the Vicar, if intitled thereto by Uſage or Endowment; and, by Preſcription, the Pariſhioner may be diſcharged from Payment of the ſecond Crop.

Query Eighteen.— If any of the above-mentioned Tythes (of which hath been no Cuſtom or Uſage for the Payment thereof) be not ſet out or paid, Whether the Vicar hath any Remedy by the Statute of 27 *Hen.* VIII. ch. 20. Or by the late Statute for the better Recovery of ſmall Tythes, or any other: And what Remedy in this Caſe?

Anſwer.— I think the Vicar's proper Remedy, in ſuch Caſe, would be by Bill in the Court of *Exchequer.*

From the Tything-Table.

To the Rector.— Corn, Hay, Timber, *&c.* are due.

To the Vicar.— Eggs, Fowls, Beaſts, Fruit, Underwood for Feweling ſold, *&c.*

Barren Lands.— Improved, are free from Tythes for Seven Years; but not Land got from the Sea, nor Marſh-Lands drained.

Fallow Ground.— Tythes are not due here, tho' the Occupier has ſome Profit.

Corn.— Pariſhioners are to cut down and bind in Sheaves. The Parſon is to take away in due Time, or ſued for a Treſpaſſer. The Farmer is not bound to watch them.

Cutting of green Tares for feeding Cattle, Grain, or Corn, ſown on Head-Lands, Peaſe and Beans eaten in a Man's Houſe, Raking and Stubble, are not tytheable.

Where Corn has grown and paid Tythes, the ſame Year, are not tytheable again.

Graſſes.— Graſs, Hay, Clover, Lucern, Cinquefoil, *&c.* applied to Feeding of Cattle, are tytheable every Tenth Cock, according to the Cuſtom

tom of Places. Graſs cut for Suſtenance of Cattle, the Owner not having ſufficient otherwiſe, is not tytheable.

After-meath, or After-paſture, pay no Tythes unleſs by Cuſtom.

Paſturage for Beaſts kept for Plough or Cart, or for Pleaſure, pay no Tythes.

Cattle.— Tythes ſhall not be paid for young Cattle bred for the Plough or Pail.

If Tythes are paid for Wool, the Sheep ſhall not pay for their Herbage.

Oxen or Steers, kept for Sale, pay Tythes for their Paſture; but not Wethers, becauſe they render Tythe of their Wool.

Timber Trees.— Oak, Aſh, Elm, *&c.* are not tytheable, nor Trees growing in Parks, Foreſts, Chaces, and the Branches, which ſhoot and bark, are diſcharged with the Bodies and Fruit-Trees; and Aſpin, Beech, Haſle, Holly, Willow, Maple, *&c.* where uſed for Building.

Underwood.— Tythes are generally due, if ſold ſtanding, payable by the Buyer: If felled, by the Seller. In like Manner Broom and Furz; but are not tytheable, where uſed for Houſe, Hedge, or Cart. Acorns, Maſte, *&c.* if they drop from the Tree, and Swine eat them, pay no Tythe; but if ſevered for feeding Swine they do, or if gathered and ſold. Apples, Pears, Plums, *&c.* in Incloſures, gathered for Sale, pay Tythe in Kind.

Fowls and Eggs.— Tythes of Ducklings and Geeſe, are uſually paid in Kind; but of Hens and Turkies, moſt commonly in their Eggs, as Cuſtom guides. No Tythes of Swans, Turkies, Pheaſants, Partridges, Pigeons, *&c.* for them, or their Eggs, are due by Right, they being wild by Nature, unleſs by Cuſtom. But, if Tythes be paid for the Young, there ſhall be none for the Eggs. No

Tythes

Tythes are due for Pigeons conſumed in a Man's Houſe.

Beaſts.— If a Man has ten Calves, Colts, Lambs, *&c.* in one Year, Tythe is payable; but, if he has fewer than ten, none in Kind is to be paid, that Year, except Cuſtom warrants it; but, in ſuch Caſes, there is uſually a Rate-tythe, or the Parſon tarries till next Year. They are payable, when weanable.

Milk-Cheeſe.— Under this Head is comprehended Butter and Cheeſe. Milk is to be paid every tenth Meal, and carried either to the Vicarage-Houſe, or Church-Porch. A Number of Cheeſes may diſcharge the Milk, for no Tythe for Cheeſe or Butter is due of itſelf, being made by Labour.

Wool and Skins— of Sheep and Lambs are tytheable, proportionably to the Time fed in the Pariſh; to wit, eight Pounds in eighty, if a Year; four for Half; three if a Quarter, the Twelfth if a Month, and nothing for leſs than thirty Days. By Cuſtom, it may be paid at *Lammas* Day, though due at Sheering-time. If ſhorn, and die before *Eaſter* following, no Tythes are due; nor for Sheep that feed after the Corn is reaped. Sheering of Sheep, to preſerve them in their Walks from Brambles and Vermin, is not tytheable. If the Owner kills his Sheep, he muſt pay Tythe for the Wool, but not for the Skin; nor for Pelts or Fells of Sheep which die of the Rot.

Deer, Hares, Conies, &c.— No Tythes are due for Deer, Conies, Wild-Fowl, or Fiſh taken out of the Sea. But Trouts, taken out of a River, are adjudged tytheable.

rance. Thus Matters went on, till they could not well proceed any farther, through the great Loſs each other ſuſtained. But the End proved more fatal than all this to the Yeoman and his Family; for it happened to be in the Time of Conteſt, that the Yeoman was overtaken with the Small-pox at a very advanced Age, and died by them. Then the eldeſt Son ſucceeded to the Father's Eſtate, worth, at leaſt, fifty Pounds a Year (but mortgaged) and who furiouſly continued the Proceſs, till he loſt the Suit, and became a Bankrupt. Preſently after this, the Yeoman's youngeſt Son, about thirty Years of Age, died of the Small-pox in *London*, who, to ſhew the World, he renounced any Approbation of his Father's or Brother's Proceedings, bequeathed the Parſon a Pair of Gloves. At laſt (as I remember) it was about twelve Years ago, when the eldeſt Son alſo fell under the ſame Diſtemper of the Small-pox, and died a Batchelor, as his Brother did. And thus ended the Male-Iſſue of the Yeoman, in a very remarkable Manner; and the more ſo, when I tell you the Eſtate was intirely ſold, about four Years ſince, for diſcharging the Debts it was engaged to pay off.

How a Parſon in the Vale of —— was ruined by a Law-Suit about Tythes.— This ſecond Caſe, concerning Tythes, proved more fatal to a Parſon than the laſt, and happened, as I have been informed thus: There were about forty Acres of Common-field Land, which, according to Report, had not paid Tythes, Time out of Mind. Notwithſtanding this, the Miniſter of the Pariſh demanded the Tything of it, declaring it to be his juſt Due. Upon this a Law-ſuit commenced, and the Owner of the Land oppoſed it with great Vigour; for he was at the Charge and Trouble of ſearching Ancient Records at *Oxford*, and at the

Tower

Tower of *London*; which not fully anſwering his Expectation, he went over to *France*, and there met with ſome further Information, how he might, in ſuch a Place in *England*, get more Knowledge of the Matter, and it hit his Purpoſe. Thus, being furniſhed with ſufficient Intelligence from Antiquity, the Owner become capable of unravelling all the knotty Part of this Affair: So that, after ſeveral old Men were ſummoned up to *Weſtminſter-Hall*, the Tryal came on, and the Cauſe was given againſt the Parſon; who, though he had two Livings, that, as I was told, brought him in above two Hundred a Year, yet it ſo diſmayed him, that he has been ever ſince in a moſt diſmal Condition, even uncapable of diſcharging his Duty. As to the Owner of the Land, notwithſtanding he got the better of the Law-ſuit, he was brought under a great Loſs, and would have ſtill been a much greater Sufferer, had he not had good Aſſiſtance; for, on this Account, ſeveral became jealous of their Rights, and thought, if this Man had loſt the Cauſe, it would have been an Encouragement for the Parſon to proceed on further Incroachments. But, if I am not miſtaken, there was likewiſe a Tryal firſt on the ſame Account at an Aſſize, and carried in Favour of the Owner of the Land: However, this I am ſure of, the Law-ſuit was depending ſeveral Years, and cauſed ſome Hundreds of Pounds to be ſpent, before the whole Affair was intirely ended.

A ſecond Caſe.— Another Parſon, who lived about ſeventy Miles to the Southward of *Gaddeſden*, became ſo inflamed with Avarice, that, though he enjoyed a Living of a hundred and fifty Pounds a Year, yet he reſolved to puſh on his Endeavours (as they told me) for doubling his Income. Upon this, he began gathering his Tythes in Kind, in ſo ſtrict a Manner, that the Pariſhioners thought them-

themſelves oppreſſed, and forthwith commenced a Law-ſuit for their Relief; and accordingly it was carried on with great Vigour on both Sides, till the Parſon was worſted, and became a Debtor for ſo large a Sum of Coſts, as deprived him from doing his Duty for ſome Time.

CHAP. XX.

Of Impoſition on Parſons.

How a Gentleman impoſed on the Rights of a Parſon.— In a *Southern* County, there formerly lived a Gentleman of about four hundred Pounds a Year, who kept Part of his Eſtate in his own Hands, which occaſioned what I am going to relate: It happened, that this Gentleman took ſuch a Diſguſt againſt the Parſon of the Pariſh, on Account of his privy Tythes, and againſt a Gentleman-Proprietor, and Gatherer of the great Tythes, that he did all he could to leſſen their Profit in the Tything of his Corn, Graſs, Cattle, and whatever elſe was in his Power; and, to do this in the moſt compleat Manner poſſible, he began, laying a great Quantity of Land down with artificial Graſs-Seeds, for buying in and feeding Colts, Bullocks, and other Cattle, that had before paid Tythes where they fell; and thereby deprived the Parſon, and the other Gentleman, of the Corn, Turneps, Lambs, Pigs, and many other Profits, that they had before enjoyed, when he went on in an honeſt, regular Way of Huſbandry.

How the Farmers of a whole Pariſh combined againſt a Parſon to leſſen his Dues.— But to come nearer Home, I am ſorry I have Reaſon to tell a Story of the Pariſh I live in. But ſo it was: That near forty Years ago, and before I lived in it, I have been informed ſince, that, as the late Rector took

took the Tythes in his own Hands, it ſo diſguſted the Farmers, that it bred in them a Reſolution of making him weary of his new Way of taking his Tythes in Kind: And, for this Purpoſe, they unanimouſly agreed to lay down their plowed Ground with artificial Graſſes, Turneps, and every Thing elſe that might enable them to go on with buying Colts, or Calves, to wean; Cows, or Bullocks to fat; Lambs, Store-Hogs, and all they could, that might contribute to their tyrannical End, and accordingly they obtained it: For, though the Parſon, after Tryal, finding he could not manage the Affair to his Intereſt, let the Tythes, both great and privy, to a particular Man, at ſo much a Year, yet this Invention, likewiſe, failed his Expectation; for our then inconſiderate Farmers had ſo ſtraightened both the Parſon and his Tytheman in the Collection of the Tythes, that what Corn, Hay, Beaſts, Fowls, *&c.* they did gather, did not amount to the Sum formerly compounded for, and paid the Parſon at two Payments in the Year, which cauſed the Tythemen's Corn in the Barn to be ſeized on, for being deficient in the Payment of his Rent, and the Parſon ſo wearied of this Way of Proceeding, that he let the Tythes to all the Farmers, at the old Rate, of two Shillings an Acre for both great and ſmall Tythes, as it continues at this Day. But, to remark on this Caſe, and write the beſt of my Knowledge, I think the Farmers got nothing in the Main, for contriving to leſſen the Parſon's Dues, by their wrong Politics: For, in ſtriving to damage him, the Effects plainly ſhewed, they wronged themſelves. But, ſure it muſt be, that thoſe Farmers, who have endeavour-to leſſen the Parſon's Dues after this Manner, have little or no Notion of paying their Tythes for Conſcience-Sake, though it is commanded of God: If they had, there would not be ſo many Diviſi-

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ons and Animoſities reigning, as are, on the Account of Tythes. But here I muſt ſtop my Pen, as a Lay-man, and uncapable of employing it in the Writing on Divinity; I ſhall, therefore here inſert what ſome very learned Clergymen have advanced on the Subject of Tythes, as follows:

A Miniſter's pious Exhortation to Farmers, for inclining them to the ready Payment of their Tythes.—He ſays, they are to honour Miniſters, by furniſhing them, in an agreeable Manner, with the Things which are neceſſary for their Subſiſtence, according to the Command of the Apoſtle, who wills, that the Miniſters, who *govern well, be counted worthy of double Honour*, in that which regards their Living; and particularly thoſe who *labour in* preaching *the Word*, and inſtructing the People. This Regulation is founded on the Law which declares, That *the Ox ſhall not be muzzled that treadeth out the Corn*; that is to ſay, as the ſame Apoſtle explains it, that none refuſe a Subſiſtence to their Miniſter. This is alſo founded on the natural Law which imports, that *the Labourer is worthy of his Hire.* Your Miniſter diſtributes among you the Bread of the *Word of God*; he offers the Sacrifice of the Holy Sacrament, and adminiſters it to you; he performs the Service of the Church, and is always ready to diſcharge his Office. And, ſince he gives you *ſpiritual Things*, it is but *juſt*, ſays St. *Paul*, that you return him thoſe that are *temporal.* For as, in the Ancient Law, he that *ſerved at the Altar* eat of the Fleſh which was offered on it: It is, in like Manner, our Lord's Will *that thoſe, who preach the Goſpel, live by the Goſpel.* None, ſays the ſame Apoſtle, *goeth a Warfare at any Time at his own Charges, Who planteth a Vineyard, and eateth not of the Fruit thereof? or who feedeth a Flock, and eateth not of the Milk of the Flock?* The Holy Apoſtle brings all theſe Reaſons to ſhew, that the People

People are obliged to provide for their Minister, who labour in Preaching and Instructing them. On the Contrary, how often may we see the Injustice of those, who refuse to pay their Tythes and their Dues to their Minister. I know not, says he, how to conclude this Chapter with better Words, than those of the Holy Spirit in *Eccles.* *Fear the Lord with all thy Soul. Love him that made thee with all thy Strength, and forsake not his Ministers. Honour the Priest and give him his Portion, as it is commanded thee.* — Another Minister writes thus: "Now I am setting forth God's Portion, and, as "it were, offering to him the First-fruits of my "Increase: And truly it would be an ungrateful "Thing in me to deny him a Tenth-part, from "whom I receive the Whole. But why do I talk "of denying it him? It is in truth robbing him, "to with-hold but the least Part of this, which "the Piety of our Ancestors hath dedicated to him. "Alas! it is what I never had a Right to: And, "when I set forth the Tythe, I give him that "which was never mine. I never bought it in "any Purchase, nor do I pay for it in my Rent. "What then? Shall my Ancestors engross the "whole Reward of this Piety? No; I am resol-"ved to partake with them; for, what they piously "gave, I will religiously pay; and I do, in my "Heart, so far approve of what they have done, "that, were it left to myself, to set a-part what "Portion I myself should think fit, for the Main-"tenance of God's Ministers, I should take Care "that he, by whom I receive *spiritual Things*, "should want nothing of my *temporal*."

CHAP. XXI.

Of Letting a Farm.

Of the Landlord's letting, and the Tenant's taking a Farm.—I ſhould have wrote of this in laſt Month, but my Room there would not permit, becauſe, at *Michaelmas*, it is uſual for a Tenant to commence on paying Rent, though his Entrance on the Fallow is at *Lady-Day*; which Interval is to give him an Opportunity of quitting the Farm he leaves, in a regular cuſtomary Manner, and plowing up and preparing the Ground for ſowing it with Wheat the next *Michaelmas* Seaſon. And as Profit and Satisfaction are expected by the Landlord as well as the Tenant, in the letting and taking a Farm, it highly concerns them both, to inſure both, as much as in them lies, at the Beginning, while it is in each other's Power; for right Reckoning (according to the old Proverb) makes long Friends. Now as this is to be done no other Way, than by entering into ſuch mutual Agreement, under the Covenants of a Leaſe, as may anſwer theſe great Ends, I ſhall here offer ſome Hints relating to the ſame, as follows, *viz.*

Heads of Articles, drawn up by a Lawyer, for the Landlord and Tenant's Conſideration, in order for their entering into the Leaſe of a Farm.—Theſe Heads of Articles were drawn up for this Purpoſe, in a very plain and conciſe Method, by a Lawyer, that both the Landlord and Tenant might, in a ſmall Compaſs of Writing, view their reciprocal Covenants, without loading and clogging the Intellects of a vulgar Tenant eſpecially, with ſuch a long Harangue of Covenants, uſually firſt penned in the chargeable rough Draught of a Leaſe under ambiguous Law Terms, to the cauſing a ſhallow Capacity

city to miſtake the Senſe of them, and ſo be brought and cajoled into the Signing an Article againſt himſelf; as I once knew it done by a crafty Scrivener, who gave ſo fair a Face to his partial Deſign, and couched his Covenants under ſuch an artificial Dreſs, as took in a Landlord to miſtake the Senſe of them; ſo that towards the Expiration of the Leaſe, when a Diſcord happened between him and the Tenant, to a Degree of parting, the Tenant got a large Deduction for what the Landlord was ſurpriſed to find he was obliged to allow, by Vertue of the Leaſe. But, as it is well known to my Neighbourhood, I am no ſmall Enemy to Impoſitions, Frauds, and the dirty Work of Male-practices, a large Account of many of them which have happened within the Verge of my own Knowledge, or by the Information of others, may be expected from me, wherein I hope to give the honeſt Man his due Praiſe, as well as expoſe the Impoſtor, for making that proverbial Sentence the more applicable, *Happy is he, who, by other Men's Harms, learns to beware*; an Inſtruction commonly known, but too little made Uſe of, elſe there would not be that Ground-work laid for ſuch Numbers of Law Suits as have formerly, and of late Years, happened, to the Ruin of many Families; and that on ſuch frivolous Occaſions, as is enough to make a reaſonable Man ſurpriſed to hear, as I ſhall declare in Part hereafter. But to the Matter in Hand.

Tenant. Reſerving to the Landlord all Timber, and Timber Trees, and young Trees, or Shoots of any Trees whatſoever, free of any Cutting or Lopping by the Tenant, all the whole Term.

Landlord. Have Power to cut down, and carry away the ſame, doing no Damage to the Tenant.

Tenant. Not to plow up any Paſture-Ground, without paying the Sum of forty Shillings for every Acre over and above the Rent, and ſo proportion-

ably for a leſſer or greater Quantity than an Acre. Rent eighteen Pounds a Year, payable half-yearly, at *Michaelmas* and *Lady-Day*. Tenant not to cut or fell any of the Underwood, or make any of the Hedges, or Hedge-rows, or lop, or top any Pollard Trees, under the Growth, nor above the Age of nine Years; and then the Tenant is always to ſcour up the Ditch, or Ditches, where any are, and to leave, before all the new-made Hedges, a ſufficient dead Hedge, a Row of Hurdles, Stakes, and Rails, or any other able Fence, for a due Security againſt any Injury by Cattle.

Landlord. To put the Premiſes in Repair, and the Tenant to keep the ſame all the Term, leaving them in good Repair at the End of the Term.

To find rough Timber for Repairs all the Term, and the Tenant to fetch the ſame at his own Coſt and Trouble, within four or five Miles of the Premiſes.

Tenant. To ſpend all the Stover upon the Premiſes, and particularly all the Land, that he croſs-crops in the laſt three Years, he ſhall well dung or dreſs; alſo the laſt Fallow ſhall be ſowed with Clover-Graſs, and left in the ſame Manner as he found it, when he firſt entered.

To pay and diſcharge all Taxes, and Rates, as ſhall be accounted Tenant's Taxes.

To keep the Stiles and Gates in Repair, at his own Coſt, and to leave the ſame ſo.

The Dwelling-houſe, Orchards, and Gardens, are to be excepted out of this Leaſe, to which the Landlord, or any other under him, ſhall have free Acceſs, at all Times, and quiet Poſſeſſion.

Landlord. To have the Liberty, all the Time, to keep ſix Hens, and a Cock, and their Chickens, in and about the Houſe and Farm-yard; and, at the End of every Harveſt, the Landlord to turn a Pig or Hog into the Stubble, till *Chriſtmas*.

Whereas

Whereas there is a Freehold incloſed Field in the Premiſes, containing five Acres, more or leſs: Now, in Caſe the Landlord requires ſix Poles of this Ground, lying in any Part next the Gardens, he ſhall, at any Time, have the Liberty of incloſing the ſame to his own Uſe, he allowing the Tenant an Abatement of Rent in Proportion, for the ſame.

Tenant. The Tenant ſhall not gather any Stones off the Premiſes, to ſell, all the Time.

To have quiet Poſſeſſion of the Premiſes from the Landlord, during the Term.

Not to aſſign over the Leaſe to any Perſon, without the Conſent of the Landlord.

Landlord. The Copyhold is let for three Years, and, when the firſt three Years are expired, for three more; and, at the End of them, for three Years more; and, at the Expiration of them, for three Years more, till twelve Years in all are expired, and no longer. To commence from *Lady-Day* laſt, 1741, and to leave all the Premiſes in good Heart and Order, as he found them.

Obſervations on the Heads of theſe Articles.—Here I am to obſerve, that the Ground mentioned to be demiſed, or let, I ſuppoſe, was joining to, or lay near the Land of this Tenant, who rented a Farm in the Adjacency; ſo that he had no Occaſion for the Dwelling-houſe, or Gardens, here excepted; and as the whole conſiſted partly of Copyhold, and partly of Freehold Fields, the Articles are drawn up accordingly: Again, as to the Tenant's commencing at *Lady-Day* to pay Rent, it is unuſual, for the foregoing Reaſons; and what induced him to do it was, I conceive, becauſe the Fallow was ſown the Year before with Clover-Seed, *&c.* or he might buy the green growing Crop on the Ground, and ſo enjoy the Profit of all the Land from the Time of Entrance. About *Gaddeſden*, Tenants are ſeldom obliged to do any Thing to the Farm they rent,

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more than finding Straw for thatching Barns, Hogſties, or other Outhouſes, and always enter on the fallow Ground at *Lady-Day*, and begin to pay Rent at *Michaelmas* following, for the Whole. But, by theſe Articles, I do not pretend to lay down a general Rule for Leaſes, becauſe they were calculated on a particular Account; for there are many Reaſons for cauſing various Articles to be inſerted in Leaſes, according to the Nature and Cuſtom of the Country the Land lies in. Thoſe Articles, proper to be inſerted in the Leaſe of a Farm in the *Chilturn* Country, are improper for one in the Vale, and both very contrary to one ſituated in Marſhes or Fens: For Example, in a Vale Leaſe there is no Occaſion for a Proviſo to hinder the Tenant's Selling of Stones, nor, in a *Chilturn* one, for obliging a Tenant to plow Water-thoroughs, or Gutters, nor in a Leaſe of a Marſh Farm to do either, but, inſtead thereof, to bring on Stones, Chalk, Hurlock, Buſhes, or other Materials to mend By-ways, or Gateways, and drain Ditches, or other watery Receptacles; or to cut Water-thoroughs under Ground, and keep up Flood-banks, *&c.* in good Repair: Which leads me to deſcribe the Character of a good Tenant, as follows, *viz.*

The Character of a good Tenant.—A good Tenant oftentimes makes a Landlord good, as, being one, that, after the Dwelling-houſe, Barns, Stables, and Out-houſes, as well as Gates and Stiles, are put in Repair by the Landlord, he will endeavour to keep them ſo, not altogether at the Landlord's Charge, but will mend a Place at his own ſmall Coſt, although he is not obliged to it, as knowing, that a Stitch, or Nail, in Time, may ſave nine. Thus, by nailing up a Board, or mending a little Hole in the Thatch, or ſpurring up a Gate, or Stile-Poſt, before they are quite damaged, he may ſave a Landlord a conſiderable Charge. Or, if the Caſe

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is ſo bad as to require a Landlord's intire Expence, then timely Notice will be perfectly neceſſary. I knew a Tenant who very much wanted a better Dairy-Room than he had, in a great Farm; upon which, he asked it of his Landlord, as a Favour to grant him one. The Landlord was not obliged to any ſuch Thing by the Leaſe, yet, to encourage his Tenant, readily conſented to pay for doing it; and it anſwered both their Purpoſes in the End, for the Tenant got more Room, and a cooler Place, by ſinking the Ground three Feet deeper than it was, for lower he could not go for the Springs, and the Landlord added a Conveniency to his Farm that was not before. And, that he may be ambitious of deſerving this Character, he ſhould have a long Leaſe of the Farm granted to him, for one and twenty Years, where a Landlord has Power to do it, that he may be ſatisfied what he lays out in Manures and Dreſſings, or in planting Trees, Quick-ſets, or in other Improvements, may return their Benefits to him, time enough for his being a reaſonable Gainer by them. Somewhat on this Account, I have known a Tenant been ſo bold, as to be at the great Charge of ſinking a Pit in the ſame Field, and chalking all the plowed Land he rented by Leaſe only for nine Years, although ſuch Chalking would not be worn out, with good Management, under fifteen or twenty Years; becauſe, as the Caſe ſtood, the Landlord could not grant a Leaſe for a longer Time. Another, on the Certainty of a long Leaſe, will buy great Quantities of Horn-Shavings, Hooves, Hair, or ſuch other durable Dreſſings, and from Time to Time will lay them on his Ground, to the great Support of it, and will continue ſuch his good Huſbandry, where he has a Time aſcertained to him accordingly; becauſe he ventures his Money, with Aſſurance of enjoying its Value to the End of his Term. Another will be at the Expence of digging Marle-

Marle-pits, and laying Quantities of this laſting Dreſſing on his Land from Time to Time, under the Satisfaction of his wearing it out, before he leaves the Farm. Another will not fear laying out his Money to drain wet Lands, by making and ſcouring up Ditches, Ponds, or Cuts, and Water-courſes under Ground, to carry off Waters, that uſed to chill and ſpoil the Growth of his Crops of Corn; to make and keep up Banks, and other Water-fences. But theſe Works are commonly performed at the Landlord's Charge, as being too great an Expence for a Tenant to bear. Others will make and plaiſh Hedges in ſuch a Manner, as may improve their Growth; will, every Time they do it, ſcour up their contiguous Ditch, or throw up ſuch a ſufficient Quantity of Mould on the *Flower-bank* (as we call it) of a Foot-hedge, as will cauſe it to grow a-pace, and will fence, and preſerve young Hedges, and Trees, in the beſt Manner he can, from the deſtructive Bite and Rub of Cattle. Others, by Vertue of a long Leaſe, will be tempted to plant Fruit-Trees, and be at the Charge of caſing them in, or otherwiſe ſecuring them from Injuries, till they are able to ſupport themſelves; as is the Cuſtom in *Herefordſhire*, in particular, where this Practice is carried on by ſome with the greateſt Diligence, ſo that, at the End of one and twenty Years, they have been able to buy what before they rented. In any Caſe, it muſt be a very great Improvement to both Landlord and Tenant, and of vaſt Service to the neighbouring Counties, where they are Strangers to the like good Huſbandry. And, why ſuch profitable Management is not carried on by Tenants in other Counties as well as this, muſt be owing to the ill Conduct of Landlords, who, where their Lands will admit of it, ought ſo to encourage their Tenants to the doing of it, as would provoke them not to neglect it. But I know many will object, that either

either their Ground is too wet, or too dry and poor, and that it lies in open Fields, and thus Trees may be expoſed to any rapacious Hands; but theſe Excuſes are commonly frivolous. As to the firſt, there is a Way to plant Vale ſpewey Grounds with Fruit-Trees, to great Advantage, as I intend to ſhew hereafter; and, if ſuch Ground lies in open Fields, yet it ought not to diſcourage this good Work, provided the Land is ſituated at a good Diſtance from Town or Village, and near the Farm-Houſe; then, I ſay again, ſuch ridge Lands may be planted with Apples, or Pears, or Walnuts, and made to anſwer with great Profit. As to the other Objection, it is often practiſed to make poor Land rich, by making a large Foſſe, and bringing Virgin Mould from elſewhere, or firſt by improving the old Earth with ſuitable Additions of proper Manures or Dreſſings. An Example of this is about ſeven Miles diſtant from my Houſe, in the Vale of *Ayleſbury*, where Rows of Apples and Pears flouriſh to Admiration; and, in ſome Years, ſuch Trees, and the Sward-graſs Ground they ſtand on, will pay beyond every Thing elſe in the Farm, provided they are planted at a proper Diſtance. It was about the Beginning of this Month when I gathered my Apples, and from only two middle-ſized Trees I had twenty Buſhels, - - - worth three Pounds, for on the Seventh of this Month, 1742, the common Sort ſold at *Hempſtead* Market for three Shillings a Buſhel; ſo that the uſual Objection, of Apples being ſo plenty by numerous Plantations, as to ſell for a Trifle, is here proved wrong. A Day-Labourer, who lived juſt by me, planted ſeveral Fruit-Trees at his own Charge, on a ſmall Spot of Ground belonging to the Cottage he rented, and, though a Tenant at Will, lived to enjoy the Profit of them many Years. But Mr. of *Highwood Hill* in *Middleſex*, may be juſtly ranked in the

Number of the beſt of Tenants, for improving his Landlord's Farm, which, by having a long Leaſe of, at a reaſonable Rent, it ſo animated him to grub up all ſuperfluous Buſhes and Shoots, to deſtroy Thiſtles, and kill Couch-graſs, and other Weeds, that he brought the Farm into ſo good a Condition, that, towards the End of his Leaſe, his Landlord courted him to take a new one at the old Rent, though he had made the ſame, by his good Huſbandry, one Third, at leaſt, better than when he came to it; but, having got a tolerable Subſiſtence by his Induſtry, being advanced in Years and, what was moſt diſcouraging of all, being thwarted by untoward Servants, ſo that he could not manage ſo well as formerly, he refuſed it, to live in a more retired Life, for he only bought large Quantities of Hay of his Neighbours, in Hopes of getting a Penny by a riſing Market. This he declared to me, and which I believe to be Matter of Fact, as he is a Perſon of a fair Character.

The Character of a bad Tenant.— Here I muſt change the Scene with a great deal of Reaſon; becauſe a bad Tenant-Farmer is not only an Enemy to his Landlord, but to the Common-wealth in general; for as all Men live by the Farmer's Induſtry, ſo much as that fails, in obtaining plentiful Crops of Corn, Graſſes, *&c.* ſo much he is wanting of being a good Tenant, and good Common-wealth's-man. And yet this is the very Caſe of Thouſands. The firſt was a Tenant, that lived within a few Miles of *Wendover* in *Buckinghamſhire*, who rented a very large Farm ſeveral Years, and kept a ſufficient Number of Horſes for working the ſame; but was ſo obſtinately ignorant, as to believe he was in the right, when he was in the wrong, as his Crops plainly diſcovered; for this Man, who for the moſt Part made Uſe of Wheel-ploughs, would not oblige his Plough-man to go deep

deep enough, to extirpate the Roots of Weeds, and therefore not only oftentimes miſſed of getting his Ground into a fine ſweet Tilth, but, in the next Seaſon, his Wheat, Barley, and other Grain, was ſo peſtered with Weeds, that they crippled his Crops, ſoured his Ground, and multiplied their Species. Thus going on from Year to Year, his Crops grew worſe, inſtead of better, till at laſt he was forced to quit the Farm; but how much he leſſened the Rent, by his bad Management, I cannot ſay. This, I know, that a far better Tenant is come in his Room, who, I hear, goes on exceeding well, by plowing the Ground as it ſhould be, and getting great Crops off it; for this Man proves as wiſe, as the other was ignorant; becauſe, finding where the other was wrong, he fell directly into a Method, that brought the Ground by Degrees into good Order, and that was thus: He got a narrow Foot-plough, and clapped a mortaiſed pecked Share on it, which gave him an Opportunity of making this Plough enter the Ground as deep as he deſired, and, by this Means, he turned up a freſh Earth which had lain buried many Years, and at the ſame Time tore up the Roots of Weeds that had got Footing here out of Knowledge; ſo that a little Manure now went a great Way, for the freſh Mould was in ſuch Heart, as alone was capable to produce good Crops of Grain, and they ſuch Quantities of Straw, as in Courſe would create large and ſeveral Dung-hils in one Year; and thus he improved the Farm, and is now in the greateſt Reputation for a topping Huſbandman in the Country he lives in. The next I ſhall take Notice of is one that rented a Farm of above a Hundred a Year, who, having a Leaſe of the ſame for nine Years, acted the bad Huſbandman to a great Degree; for altho' he came after a Tenant who did ſo well, as to take a larger Farm, yet he acted ſo averſe to the other, that he went

out of this, into a very little Farm indeed, which occaſions the following Character of him: He ſuffered his Horſes to go into his Stable with dirty Legs, and with ſuch ſticking Dirt on them, that he could not get off without Waſhing, and then Cracks or Scratches bred in their Heels, and from ſuch, ſometimes, proceeded greaſy Heals, *&c.* Two Flocks of Sheep have rotted in one Year; near a hundred Hens have been ſuffered to lay their Eggs in Hedges, and other open Places, and ſo carried off by any that could come at them; his Hogs would often run among his green Wheat, and other Corn, to the Spoiling great Quantities of it; his Ground was very much infeſted with Thiſtles, and, for Want of ſufficient Dreſſing, returned him ſuch wretched Crops of Corn, as obliged his Landlord to ſeize his Effects for Rent. The third was a Tenant at Will, and a crafty Knave, who rented a Farm of about forty Pounds a Year, in *Hertfordſhire*, that knew the Method of Farming as well as moſt *Chilturn* Farmers; but, finding he was not cloſe tied to Articles under Hand and Seal, he took the Liberty of making, as he called it, the beſt Uſe of his Time, for, knowing that the young Owner was to take the Farm into his own Hands in a ſhort Time, he made it his Buſineſs to get all the Heart he could out of the Ground, for nouriſhing his Crops of Corn: Accordingly, he plowed often, to get the Earth into a fine Tilth, and ſowed it with Wheat, Barley, Oats, *&c.* with little or no Dreſſing, and this he did for the laſt two Years. The ſame Sort of Villany he acted with regard to the Hedges, for theſe he cut up, and plaiſhed ſo very thin, that they would hardly keep out Cattle the very firſt Year, nor fully recover their due Growth, under ten or twenty; and all this was done to get as much Fagot-wood out of them as he could; neither ſcouring up the Ditches, nor throwing up

Flower-

Flower-banks, which is a moſt neceſſary Work to be done, every Time a Hedge is made. In ſhort, this Tenant ranſacked all he could out of the Farm, before he went off. And ſo did another, almoſt in the like Caſe, who, being to leave his Farm, took the Opportunity, while he might, to ſow all the Ground he could with Wheat, againſt the Harveſt 1741, and being to leave it at *Michaelmas* 1742, he ſowed all the Ground he could, the following Spring, with Barley, Peaſe, Oats, *&c.* as having no Room for ſowing Wheat this Year. Thus, by ſowing all the Wheat he could without any Dreſſing, for 1741, and ſowing all the *Lent* Grain he could without any Dreſſing, for 1742, he ſo beggared the Land, as to do it a very great Diſkindneſs for ſeveral Years to come. But I have not yet given a Character of a worſe Tenant than all I have wrote on, for this was a Villain in Grain, becauſe he acted the malicious Part to a very high Degree, thus: Being obliged to quit the Farm he had for ſeveral Years rented in *Hertfordſhire*, for his ill Behaviour, he was reſolved to be up with his Landlord, and accordingly took the Opportunity of ſowing Part of the Farm with Wild-oats in the Night-time; but, unlucky for him, a Perſon happened to ſpy this Tranſaction, and diſcovered it to his Landlord, who made him pay Sauce, and branded him for a Rogue to the whole Country about him.

The Character of a good and bad Landlord.—Now I am come to my laſt Diſcourſe concerning Landlords and Tenants; and, as I ſaid, a good Tenant makes a good Landlord; I ſay here alſo, that a good Landlord makes a good Tenant; for when a Landlord puts every Thing belonging to his Farm in perfect Repair, and lets his Land at ſuch a reaſonable Rent that a Tenant may live comfortably on it, it encourages him to go on with Briſkneſs, ſuffer as little

little Damage to be done to his Houſe, Barns, Gates, and Stiles, and to his Trees and Hedges, as poſſible he can; and, in ſhort, to promote his Intereſt to the utmoſt of his Power. On the contrary, when a Landlord does no more than he can barely help in putting his Farm in Order for a Tenant's taking it, will inſiſt on a Rack-Rent, and is ſo tight on his Tenant, as to oblige him to pay his Half Year's Rent to a Day, otherwiſe he threatens to diſtrain him; and ſo damps the Spirits of ſuch a Man that he is almoſt always railing againſt his Severity, and glad to ſee Things go to Ruin, without the leaſt Care, in order to put his Landlord to Expence, as I have known an illiterate wicked Tenant guilty of. There are many Inſtances of good and bad Landlords as well as ſuch Tenants; accordingly, I ſhall here give an Account of ſome few of them: A great Farmer, living in *Leiceſterſhire*, brings up Wheat to *Hempſtead*, or another Market, almoſt every Week throughout the Year: And it was on the 18th Day of *June* 1741, that his Man ſaid he had then One Hundred and Fifty Sacks of Wheat left: That he has had ſeven Years Wheat by him at a Time, having a Hundred a Year of his own Land, and rented One Hundred and Fifty beſides, becauſe his Landlord truſted him three Years Rent; and as Wheat ſold in 1740 and 1741 for Thirty and Forty Shillings a Sack of five Buſhels, or as we call it in *Hertfordſhire* a Load: The extraordinary Price paid his Rent for that Time. Another Landlord (as I am told) exceeded all others that I ever heard of in the letting his Farm, thus: Not many Miles from *Harrow-on-the-Hill* in *Middleſex*, a Farm of eighty Pounds a Year was to be let out of the Landlord's own Occupation, who being forced to take it into his own Hands till he could get a Tenant to his Mind; he ſowed nine and twenty Acres of it with Wheat, and as many with Horſe-beans as coſt him nine Pounds.

Pounds. This Farm a Tenant entered upon at *Michaelmas* 1741: And the Landlord gave him all the Wheat-Crop, with four Horſes, one Cow, a Waggon, Carts, and Ploughs, with many other Things, making him pay only the nine Pounds for the Bean-ſeed that he laid out of his Pocket. To the plowed Ground of this Farm belong three and thirty Acres of Meadow, for which he began to pay Rent from *Michaelmas*, and to hold the Farm one and twenty Years, when he is by Leaſe allowed to carry off all the Stock for his own Uſe; ſo that twenty Pounds ready Money (they told him) was enough to come on this Farm, and that was chiefly neceſſary for buying in ſome Sheep. The next Caſe was one well known to me, as it happened in the Pariſh of *Chedington* in the County of *Bucks*, where a worthy honeſt Man owned a large Farm, which he let to a Tenant that was unable to rent any more of it than one hundred and twenty Pounds a Year; the reſt being above forty Pounds a Year more was rented, or let out to ſeveral others. However, this Tenant being a moſt diligent ſaving Man, he acted the good Huſband ſo well, as highly to pleaſe his Landlord, which encouraged him to give the Tenant three hundred Pounds Credit in Forbearance of Rent. This ſerved the Tenant to a very great Degree, becauſe he was thereby enabled to buy in more live Stock, ſo that he paid his Rent very well afterwards, excepting the three hundred Pounds, which lay in his kind Landlord's Hands as ſo much lent him, and of which Loan he willingly paid lawful Intereſt ſeveral Years together, getting more of the reſt of the Land belonging to the Farm into his Hands, and went on in a flouriſhing Condition, even to be a celebrated Farmer; for his very Horſes were regarded to make one of the beſt Teams that came to *Hempſtead* Market; and *Hempſtead* pretends to vie with any other Market-Town in *England* for a Shew

a Shew of the fineſt Teams, and this with good Reaſon; becauſe, as we lie near *Dunſtable*, *Biggleſwade*, *Thame*, and not a great Way off *Northampton*, *Oundle*, *Rugby*, *Leiceſter*, and ſeveral other capital Northern Fairs, it gives our head Farmers the greateſt Opportunity to buy and ſell the beſt Collar-Horſes in the whole World: Which is now become a general Practice, and carried on throughout the Year under ſuch Reputation, that great Numbers of brave Horſes are bought out of our Teams, as they are ſeen in their Harneſs at *Hempſtead* Market; and the more, becauſe this Opportunity gives Buyers much more Aſſurance of laying out their Money on ſound Cattle, free of thoſe Bites and Impoſitions oftentimes ſchemed at Home, and practiſed afterwards at Fairs. And as I live on a Spot of Ground ſituated almoſt in the Center of thoſe Farmers who make it their Buſineſs to buy and ſell the beſt of Coach and Cart-Horſes: I can help any Gentleman to great Choice, either at Market, or better at the Farmers Stables. But to return to the Tenant I am writing of; this Man went on exceeding well, till the Farm was ſold to another Gentleman, who, being a perfect Stranger to Country Affairs, fell into an Apprehenſion, that a Tenant, who owed three hundred Pounds to his former Landlord, ought not not to be truſted any longer than needs muſt: And therefore warned him off the Farm; which obliged this Tenant to ſell the Crop on the Ground to a ſucceeding one, and to ſeek out for another to occupy himſelf, and, as it happened, he luckily met with two Farms at once that he hired; and lived to pay off his old Score of three hundred Pounds, with all Intereſt for the ſame, beſides getting, as it is thought, enough to purchaſe a good Farm, and is now ſtill getting more in the Pariſh of *Ardenham*, near *Watford* in *Hertfordſhire*, where he lives at this Time in very great Buſineſs. But his former Landlord did not

not do ſo well as he; for, by letting his Farm to two other Tenants, the firſt, after wearing out a nine Years Leaſe, ſo diſagreed with his Landlord, that they parted; and then he let a Leaſe to a third Tenant, who, after ſeven Years Living in the Farm, deſired his Landlord to ſeize, for that he could not pay Rent any longer, and ſo was forced to take the Farm into his own Hands, repenting a thouſand Times, to my certain Knowledge, he did not encourage and keep on the firſt Tenant. Yet this Gentleman did not commit ſo great a Miſtake as another I heard of in the Weſt Country, who is ſaid to ſuffer ſeveral of his Farms to lie empty, and run almoſt to Ruin, becauſe he could not let them at an advanced Rent; and thus remained ſo obſtinate as to involve himſelf in very great Debts, even to the owing his Maſter above five hundred Pounds, as I was told by a Servant that lived with him. Where indeed a Farm is improved to a very conſiderable Degree by the three-wheel Drill-plough and Horſe-break, or otherways: There is ſome Room for ſuch an advanced Rent; but to impoſe a new large Rent on a Farm, that is without ſuch Improvements, muſt be very diſcouraging to a Tenant. A certain Tenant took a large Farm, and, to pay a large Rent laid on the ſame, took all the Care and Pains he poſſibly could; but finding he run out fifty Pounds a Year for more than one Year, he ſolicited his Landlord to a ſmall Abatement of Rent; but his Landlord would not, becauſe (as is ſuppoſed) having ſeveral large Farms in the Country about this, he was loth to bring up an abating Precedent, leſt it ſhould have an Effect on his other Tenants to his Prejudice; and ſo the Tenant was forced to leave the Farm, and the Landlord to take it into his own Hands, for none will give the Rent the laſt Tenant took it at, as I can hear. To this Account I add what I read in the *Northampton* Mercury,

dated *May* 17, 1742, as follows, *viz.* — On the 5th Inſtant died at *Hilſborough*, in the North of *Ireland*, the Right Honourable *Trevor Hill*, Lord Viſcount *Hilſborough*, eſteemed one of the beſt Landlords in *Ireland*; he is ſucceeded in Honour and Eſtate by his only Son *Wills Hill*, Eſq; now Lord *Hilſborough*. —In the Pariſh of *Chaffont*, that lies between *Amerſham* and *Uxbridge*, a Tenant entered a Farm commencing from *Michaelmas* 1741, which the Landlord had held in his own Hands; and, to encourage the Tenant in good Huſbandry, he excuſed him from paying any Rent the firſt Year, provided he laid as much Money out as that came to in Dreſſing; accordingly he laid a Year's Rent out in *London* Soot and Coal Aſhes; the Soot for his Corn, and the Aſhes for artificial Graſſes: But as it happened, this Money was laid out to little Purpoſe, for, the dry Summer of 1742 ſucceeding, it did little Good. — Another Tenant took a Farm by *No Man's Land*, as it is commonly called, near *Whethamſtead*, of a Landlord who had ſowed it all with Oats; which ſo beggared the Ground, that, to make his Tenant Amends, he gave him a Year's Living in it for nothing.

CHAP. XXII.

Of SERVANTS.

OF *Fairs and Statutes for Hiring of Farmers Servants.* — The laſt Month is the chief Month in the whole Year for this Purpoſe, for, on ſeveral Days in that Month, Statutes and Fairs are held in ſeveral, I may ſay in many Parts of *England*; as has been the ancient, and now almoſt univerſal, Cuſtom of this Nation, becauſe of the great Service theſe yearly Appointments, or Statutes,

tutes, do to Maſters, Miſtreſſes, and Servants in general; who here have a fair Chance of ſupplying each other's Wants for a whole Year. Two Farmers talking together on the Subject of Servants, ſays one, they are troubleſome and chargeable Evils. Says the other, I can't ſay ſo; becauſe I think I get a Hundred a Year by them. For indeed the Farmer ought to get by every Thing he deals in, to defray the many Expences and Loſſes he is liable to, above any other Tenant whatſoever: And as there is no ſuch Thing as carrying on the Buſineſs of Farming without ſome Sorts of Servants; it highly concerns the Farmer to endeavour the Choice of the honeſt ſkilful ones, becauſe, as his Servants are, ſo will his Buſineſs be well or ill done; though I am ſenſible that many of them are ſpoiled by the ill Conduct of their Maſters, but of this hereafter. In the mean Time, I am here to obſerve, that there are many Misfortunes happen by the random Way of hiring Servants at Statutes, where, as they meet in a promiſcuous Multitude, and come from all Parts of the adjacent Country to be hired without a Character, the Farmer runs a Riſque of their Honeſty and Ability; contrary to the *Londoner*, who neither hires for a Year, nor without a Character from their laſt Maſter or Miſtreſs. One of my Neighbours went to *Ayleſbury* Statute (which lies nine Miles from *Gaddeſden*) to hire a Man and Maid-ſervant, where having little Diſcourſe with them, and hiring them without a Character: The Man proved an obſtinate Fool, and the Maid an errant Thief. Statutes for hiring Servants I ſuppoſe take their Name, or Title, from Statutes or Acts of Parliament made to ſupport their Authority; accordingly the High-Conſtable of the Hundred is here appointed ſole Officer of the Place, to regiſter the Names of ſuch Maſters, Miſtreſſes, and Servants, who here come to-

gether, by a Bargain of Wages for one whole Year, commencing at *Michaelmas*; when, therefore, a Servant is thus regiſtered in the High-Conſtable's Book, the Hiring is thought to be more valid, than when the Maſter and Servant engage themſelves in a private Manner; inſomuch that it often ſtrikes an Awe upon Servants, by their thinking the Regiſter makes Offences more penal, in Caſe of their being Aggreſſors. In our Parts, *Hempſtead*, *St. Albans*, and *Kempton* are reckoned the greateſt Statutes for the *Hertfordſhire* and *Middleſex* Farmers to provide themſelves with Servants; but, if we about *Gaddeſden* want Maid-ſervants, ſeveral of our Farmers go to *Ayleſbury* Statute, becauſe, in *Aylesbury* Vale, there are great Dairies carried on, that employ conſiderable Numbers of theſe uſeful Females, who, if rightly choſen, commonly prove more hardy, more ſtrong, and more diligent than our Country Wenches, that are brought up more tenderly, and more unſkilful in the Buſineſs of Huſbandry; which leads me to give a more particular Account of Servants, as it relates to their ſeveral Stations, or Offices, for which the Farmer commonly hires them: And, firſt, I ſhall begin with the moſt uſeful one of all others, the Ploughman.

The Character of a Ploughman.—This is the chief Servant, and the moſt uſeful of all others about a Farm; for upon his Skill and Diligence depends very much the Succeſs of Corn-crops, *&c.* At the Statute he comes among the reſt to be hired, and, if he is a capital Workman, he will aſk ten or twelve Pounds a Year; if a young one in the Art, five or ſix, for there is all this Difference in a *Chilturn* Ploughman eſpecially, that holds ſeveral Sorts of Ploughs. With us there are only three in common Uſe, and they are the two-wheel fallow Plough, the two-wheel Pea-ſtitch Plough, and the two-wheel Wheat ſtitch Plough; but there are other *Chilturn* Farmers,

Farmers, who employ the two-wheel double Plough, the two-wheel Bob-tail Plough, the two-wheel Wood-chip Plough, the two-wheel Jockey-plough, and the three-wheel and Pulley Drill-ploughs, and ſometimes, but rarely, the peaked-ſhare Foot-plough. Others, again, will uſe only the one-wheel *Glouceſterſhire* Plough, the one-wheel over-cheek, and one Wheel under-cheek Plough. All, or moſt of theſe, ſome Ploughmen will hold exquiſitely well, by laying their Thoroughs, or Furrows, ſo even, that one will be hardly higher or broader than another; for which Reaſons, many of the better Sort of Ploughmen will make a Bargain to do nothing elſe all the Year, than the following Works: To hold Plough eight Hours, from Six to Two o'Clock, whenever the Weather permits; at Hay-Harveſt, to act as head Man in Mowing, and leading on the reſt of the Company; at Corn-Harveſt the ſame, in Reaping and Mowing, for which Reaſon he is called *Lord*, or Chief of the Workmen. In the ſnowy and froſty Seaſons, when he cannot go to Plough, he will drive the Team or Dung-cart, and alſo, every Time it draws Corn to Market, he accompanies it; but refuſes to do any other Work, unleſs it be to attend at the Smith's Shop, to direct him in making and ſetting the Point of the Share aright, that is to ſay, as he would have it, or to mend the Harneſs upon a Pinch of Neceſſity, when the Collar-maker cannot be had; or, to ſhoe all the Horſes, which, now-a-days, is very common for the Ploughman to do, as a ſaving Article to the Farmer, becauſe he thinks it will anſwer, if he gets no more than the old Shoes clear, which helps towards making Share-Points and other odd iron Work. From the Farmer that keeps eight Horſes, to one that keeps but five, a Ploughman will inſiſt on having thoſe Privileges inſured to him; and not only in theſe, but in ſome others, as his being allowed a Horſe-keeper under him,

him, that takes him moſtly off the Trouble of looking after the Horſes, that drives his Plough, that gets up every Morning before him, and who attends him every Time he drives the Team to Market; but, in Vales, the Caſe is ſomewhat altered, for here the Farmer ſeldom, or never, hires a Horſe-keeper, becauſe, in this dirty wet Country, where the Sight of a Stone is a Rarity, their Horſe-ſhoes, and their Socket, broad Share, and Coulter belonging to their Foot Plough, laſt a long Time, ſo that the Ploughman here has ſeldom Occaſion to go to a Smith's Shop, and, therefore, has the more Time to look after his Horſes; and, accordingly, he is hired to plow, and look after his Horſes himſelf; and the Boy, that drives his Plough, is one that is kept not only for that, but to fold and unfold, where there is no Shepherd kept, to look after the Cows, and do any odd Jobbs; nor do they employ ſo much Care and Pains in dreſſing and managing their Horſes in Vales, as they do in *Chilturn* Countries, by reaſon they are ſo liable to be dirty, as leſſens the Pride of their Horſe-maſter; nor have their Ploughmen ſo much Wages as the *Chilturn* Ploughmen, becauſe the Vale-men cannot ſo well hold Wheel-ploughs as the *Chilturn* Men can the Foot-plough; which confines this Servant to work in the Vale, and no where elſe, and thus they come by them for little Wages. But the *Chilturn* Ploughman excels, in that he can do many Sorts of Work that the Vale-ploughman cannot do. Thoſe about us, moſt of them, can fell Trees, plaiſh Hedges, faggot, ſow Turnep-ſeed, and hough them afterwards; ſow Clover, Rape, Wold, and all, or moſt, other Seeds ſown by Farmers; therefore, Gentlemen ought not to be ſurpriſed, when they hear that one of our Country Ploughmen aſks eight, ten, or even twelve Pounds a Year; for, where he has Buſineſs enough, he can deſerve it far better than many of

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the worſe Sort can half the Money; and, to give ſuch a compleat Ploughman his juſt Character, I ſhould ſay, he ought to be one capable of adviſing what is beſt to be done with ſuch a Piece of Ground, what Sort of Plowing is moſt proper for it, what Sort of Seed is moſt requiſite for it, what Manure, or Dreſſing, is moſt natural to it, and when is the beſt Time to ſow it; when Graſs and Corn are fit to mow, and Wheat to reap, Peaſe and Beans to hook, and ſo a hundred Things more. In ſhort, a true-bred Ploughman, in our *Chilturn* Country, may be deemed a Sort of Counſellor to his Maſter; for a good Huſbandman holds it as a Maxim, That that Farmer, who is above conſulting his Ploughman, will never farm, as he ſhould do. I ſent a Son of mine, at eighteen Years of Age, into a Gentleman's Service, to be his Ploughman, and look after his great Farm in the Vale Country; and, as he was then accounted a good Workman at the Plough, and at Sowing, Mowing, Reaping, houghing Turneps and Carrots, felling Timber-trees, plaiſhing Hedges, and at moſt other ruſtic Buſineſs, he had the Care of all his Maſter's Country Affairs, and lived with him till he died in 1740; and, in 1741, being not quite twenty Years of Age, I ſent him ſixty Miles farther into the North, on ſomewhat the ſame Footing, and he gave his Maſter great Satisfaction, till he was overtaken with the Small-Pox, and, after that, a violent Fever; then I ſent for him Home, with many Thanks to the Gentleman, for having him looked after, as if he had been his own Son, as he aſſured me he would; ſo that now, at under one and twenty Years old, he is capable of performing all the Work of a *Chilturn* and Vale Farm: For it is well known, I bring up my Boys to work as ſoon as they are able, and continue them as cloſe to it as poſſible I can, which makes them Workmen at an early Age.

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The Character of the Tasker-Servant.—This Man I take to be the next uſeful Servant to the Ploughman that a Farmer has. When he comes into a Statute to be hired, he commonly holds a Flail in his Hand, to ſhew that he would be hired for a Taſker; accordingly, the firſt Queſtion generally aſked him is, where he lived laſt, and whether he can do a ſufficient Day's Work at thraſhing and cleaning of Corn, and he as often anſwers in the Affirmative. Now, it is ſeldom ever aſked, why he left his laſt Place, becauſe it is even cuſtomary to change Service in the Country every Year, for the Sake of Variety of Living, learning Improvements, and getting new Acquaintance; by which, I muſt needs ſay, a Servant has alſo a great Opportunity of informing his Judgment, pleaſing his Fancy, and ſometimes getting better Buſineſs. His Taſk is commonly to thraſh five and twenty Buſhels of Wheat in one Week, and clean it for Market; I ſay, this is his common Stint, for Wheat ſeldom yields ſo well as to confine him to thirty Buſhels, but ſometimes to leſs than five and twenty; but this is regulated in Proportion to the common Yield of Wheat in the ſame Pariſh, for Cuſtom very much governs in the Farmer's Buſineſs; as I am going to ſhew by this one Example of a Taſker, who generally thraſhes his five Buſhels of Wheat in one Day, and cleans five and twenty Buſhels on every ſixth Day. If a Taſker is a clever Workman, and the Wheat yields well, he will do his Week's Work compleatly in five Days Time; and for this Purpoſe he works the harder, that he may enjoy the ſixth Day to himſelf. I knew one of theſe, that lived near *Wheathamſtead* in *Hertfordſhire*, ſo diligent at performing his Taſk, and cleaning the Wheat ſo well, that his Maſter indulged him with the Liberty of applying the ſixth Day to his own extra Profit, which he did by carrying Sacks of Corn on the Market-Day at St. *Albans*.

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I knew another Taſker did the ſame Work in the ſame Time, for the Sake of only living idle on the ſixth Day. Others will begin very early, and work harder than ordinary to finiſh their every Day's Taſk, by two or three o'Clock in the Afternoon, that they may ſpend the reſt of the Day at their Will: But theſe are particular, not general Caſes, for though it may appear to ſome by this my Way of Writing, that a Maſter, in this Reſpect, may be thought to have no Occaſion to repine at a Taſker's haſty Work, if he does it well, and thereby taking about one Day's Time in a Week to himſelf, yet very few of Maſters will allow a Taſker that is a yearly Servant this Privilege; or in any wiſe to abſent himſelf from Home, unleſs it be on a capital Holy-day: Becauſe, as they ſay, they know not what Accident may happen in the mean Time, that may require their immediate Help; for it is certain, no one Land Profeſſion in the World is liable to more Miſchances than that of a Farmer; and therefore they commonly oblige their Taſker to conſtant Attendance, let him do his Work early or late. However, to write more fully on theſe Points, I ſhall further obſerve, that there are two Sorts of Men-Taſkers: The Day-Labourer and the conſtant Houſe-Servant; both theſe are required to perform a Day's Thraſhing alike; and if they are allowed the Liberty of doing their Day's Work, or Taſk, as ſoon as they can, in order to have the reſt of the Day to themſelves, it is generally allowed them, becauſe it is the Cuſtom of the Country thereabouts. A great Farmer, near *Tring* in *Hertfordſhire*, who rents about three Hundred a Year, always allows his Day-Labourer-Taſker, and his Servant-Taſker, the Liberty of doing their Work as ſoon as they can, ſaying, if they are obliged to work all Day, it only learns them to be idle, for even then they will do no more than their Taſk: Whereas, if a poor Day's-man has the Liberty of doing his

Work in nine Hours, that he would be twelve Hours about, if confined, it would give ſuch a poor Man an Opportunity of getting an extraordinary Penny towards maintaining his Family the better, and yet not hurt the Maſter. A Taſker ought to be very clearly about his Work, and therefore moſt of them have a Pair of Shoes made of an old Hat, for by the Tread of this he cannot bruiſe the Kernels. A Taſker ſeldom leaves the Wheat-barn, till the Corn is thraſhed out; and when he thraſhes either Barley, Beans, Peaſe, or Oats, if they yield well, his common Taſk is thus: -- To thraſh and clean five Quarters of Barley in one Week; to thraſh and clean five Quarters or Seams of Oats in one Week; to thraſh and clean thirty Buſhels of Beans in one Week; and to thraſh and clean thirty Buſhels of Peaſe in one Week, and all theſe fit for Sale in a Market; or, according to the Quantities (as I ſaid before) generally thraſhed in the Neighbourhood. But, to prevent Diſputes about Work, the Maſter commonly makes a Bargain with the Taſker at Hiring, by telling him, that, if he lives with him, he muſt thraſh ſo much Wheat, or Barley, or Oats, or Beans, or Peaſe in a Day, *&c.* And therefore a Taſker will do no other Buſineſs than thraſh, except it be to give Cows Straw Night and Morning in the Farm-yard, to mow at Hay-time, and to reap and mow at Harveſt. I might here give an Account of Diverſity of Ways of cleaning Corn, but, as that material Article requires a larger Diſcourſe than my preſent Room will admit of, I muſt defer it, till a better Opportunity offers.

The Character of a Shepherd-Servant. — This Man appears at the Statute-Fair, or Market, or Wake, with a Lock of Wool in his Hat, to ſhew his Intention of being hired as a Shepherd; and by ſome is accounted as uſeful a Servant as any the Farmer has; and who, accordingly, gives him near, if not quite, as much Wages as the Plough-man,

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if he is to have the Care of a large Flock of Sheep; for on his Care very much depend the Lives of theſe moſt ſerviceable Creatures, by his preventing their rotting in his good Management of them, and their damaging green Corn, Graſſes, and other Vegetables; for ſometimes a Shepherd, in Common-fields eſpecially, is obliged to let his Flock graze cloſe to the Sides of ſtanding green Corn, and Turneps, *&c.* which the Sheep are very prone to break into; and then, if he is not a very diligent, vigilant Servant, he may bring his Maſter under a great Damage. A lame Shepherd and a lazy Dog are ſaid to be the beſt Attendants on a Flock of Sheep, becauſe theſe cannot very readily prejudice their Bodies by hard driving them, or running them about, as too many of the ignorant Sort do, and thereby occaſion the Breed of the Scab, Red-water, Leanneſs, and other Maladies. A Shepherd ſeldom does any Thing elſe, beſides folding his Sheep every Night, when the Weather permits, unleſs it be at Sheering-time; and then, if he can ſheer, he muſt be one of the Number; if he can't, he muſt wait upon the Sheerers, and wind up the Wool in Fleeces. If the Farmer will have him work in Hay and Corn-Harveſt, he muſt hire one in his Room to look after his Sheep. And now, as I am writing on the Buſineſs of a Shepherd, I muſt obſerve that, in my Travels, I verily believe, among the many Shepherds I diſcourſed with, I hardly met with one in ten of them, that knew his Buſineſs tolerably well: Though, I muſt own, that, in the *Weſt* Country, I met with the moſt accute of all others; for here they keep the largeſt Flocks, I believe, of any in *England*, and yet their Land, for the moſt Part, is a bad Soil, and naturally very poor: But, by the Help of their great Number of Sheep, they ſo enrich it, that it produces ſurpriſing big Crops of Corn and Graſſes.

A compleat Shepherd ought to be Maſter of ſeveral Sorts of Medicines ready at Hand, or, at leaſt, to know how to make them, in order to ſave Hove-Sheep, Griped-Sheep, Sheep poiſoned by licking up the Glow-worm, Sheep overcome by a Plethory of Blood, Sheep inclining to the Rot, Scabby-Sheep, Sheep ſeized with the Foot-Rot, Soreneſs of Head, with Ticks, or Sheep-Lice, or with other incident Diſtempers; for, by theſe, Thouſands of Sheep are ſometimes loſt in one Year, partly for Want of that Skill which is perfectly neceſſary for applying proper and timely Medicines. But, as I have not Room to enlarge on the whole Buſineſs of a Shepherd in theſe Monthly Works, I intend to publiſh, under the Title, *Of the Practical Shepherd*, a diſtinct Treatiſe of the ſame.

The Character of the odd Man-Servant.— This Servant follows next, as being the moſt inferior of all others, except the Horſe-keeper. He is kept by moſt great Farmers in the Vale and *Chilturn* Countries, and ſo extenſive is this Man's Buſineſs, that it may be juſtly ſaid of him, as it is commonly ſaid of Women, their Work is never done; becauſe ſome of thoſe he waits on are always in Want of ſomething or other. The Maſter, Miſtreſs, and Maid, he is obliged to wait on, and aſſiſt upon Occaſion; but the Maid-Servant, in particular, he muſt ſupply with Wood, or other Fuel, fetch her Water, heat her Oven, help in milking the Cows, churning her Butter, and making of Cheeſe. He ſerves the Cows with Meat, ſuckles Calves, feeds the Hogs, runs of Errands, and is at the Beck, not only of the Maſter and Miſtreſs, but of all their Servants, on neceſſary Occaſions. At Hay-time, he mows, or elſe makes Hay; at Harveſt, he acts in the Number of Reapers, and does all other Buſineſs in his Power; for which, this uſeful Servant, has commonly, from four, to ſix Pounds

Pounds a Year, in our Country, as being the moſt confined of all others; becauſe he can, the leaſt of all others, be ſpared from Home; and, becauſe he does as much, or more Work, than any other Servant belonging to the Farmer.

The Character of the Horſe-keeper Servant.—— This is the laſt Servant I have here to write on, that is hired at a Statute, where he commonly appears with a Whip in his Hand, or a Knot of Whip-cord in his Hat. He is either a Boy, or what we call in the Country, *a Hobby de Hoy*, between a Man and a Boy; or a Man, whoſe Buſineſs is, according to his Title, to look after the Horſes, by feeding, currying, and harneſſing them; to keep the Stable clean, to drive Plough as often as it is uſed, and to accompany the Plough-man at almoſt all Buſineſs he does. At Hay-time, he either mows, or makes Hay. At Harveſt, he follows next the Plough-man or Lord, if he is able to keep up with the Company at Reaping; if not, they are very ready to pity his Youth, and do their Endeavours to help him out; for you muſt know, the Plough-man is not a little ambitious of having his Horſe-keeper next to him in the Field, as well as the Stable, or at Plough, for which the Odd-man's Wages is from fifty Shillings, to four Pounds a Year, with us. As to the Miſtreſs, and her Maid-Servants, I intend to write a particular Treatiſe on their ſeveral Buſineſſes, according to the Country they live in, under the Title, *Of the Practical Country Houſe-wife.* This Account of Servants I thought myſelf more than ordinary obliged to publiſh, for the Information of thoſe of my Readers, who may ſtand in Need of ſuch Intelligence; for, as the Changes and Chances of this Life are many, there are many Perſons who come to an Eſtate, that are little acquainted with the Management of it: When then ſuch a landed Eſtate, or Farm, comes

comes into their Hands through Choice or Neceſſity, here are ſome uſeful Inſtructions for their Proceeding, in Reſpect of Servants; and becauſe no other Author, Ancient or Modern, has given an Account of the particular Qualifications the ſeveral Sorts of Servants, fit for Farmers, ought to be endowed with; which was neceſſary to be done, not only to aſſiſt the Judgment of a Novice in Huſbandry in the Hiring of his Servants, but alſo, to prevent his being impoſed on by them afterwards, as I am further going to ſhew, by what follows, *viz.*

How a Servant refuſed his Work, and was ſent to Bridewell.— When a Farmer has hired a Servant for a Year, and ſuch a Servant proves an untoward, ſulky, ſaucy, or idle Fellow (as too many of them are) he becomes rather a Croſs, than an Aſſiſtant to a Maſter. One of this Sort lived with an old Farmer, about a Mile diſtant from my Houſe, who rented a Hundred a Year, and reputed to be a tolerable good Maſter, that had kept great Numbers of Servants in his Time. One of theſe, a young Fellow, who was hired as Odd-man, took upon him to tell his Maſter, that he would do nothing on a *Sunday*, for that he accounted *Sunday* his own, to do what he liſted. Upon this, his Maſter got a Warrant, and had him committed to *Hempſtead* Bridewell, where he was ſeverely corrected, and put to hard Labour. This happened about the Year 1736, and had ſo good an Effect upon him, that it made him a valuable Servant for ſeveral Years after; chuſing to live with his old Maſter, before any other, becauſe he had ſo happily convinced him of his Folly, and prevented him running into a vicious, ruinous Life. Next will be an Account of as good a Servant, as this was a bad one.

How a Servant, by the good Conduct of his Maſter, deſerved a fine Character.— Another Servant, who now

now lives with a great Farmer near *Whethamſtead* in *Hertfordſhire*, as a Taſker, lived formerly with another Farmer, in the Pariſh of *Ivinghoe* in *Bucks*, which are ſituated about twelve Miles diſtant from each other. This young Fellow, after he had been here a Year, acquainted his Mother, a Widow, who is my Chare-woman, that he lived in Heaven, in Compariſon of his former Places; for that, in this laſt Place, he ſerves God, pleaſes his Maſter, and every Body elſe, and ſaves Money; for here he is obliged to go as often to Church as his Buſineſs will permit him; to read a Chapter every Night in the Bible, and to attend Family-Prayer every Evening: So that here is no Allowance for Swearing and Rioting, becauſe the Maſter is ſenſible, that, at the Day of Judgment, he muſt render an Account of the Care he took to regulate the Lives and Manners of thoſe who depended on him: And thus was as conſiderate of his better Part, as the Farmer, I am going to deſcribe, was inconſiderate.

How a Gentleman run out Part of his Eſtate by ill Management, and recovered it by his good Conduct.— A Gentleman, well known to me, who was Owner of a conſiderable Eſtate, and kept ſome of his Land in his own Hands, to ſupply his Houſe with Neceſſaries, employed no leſs than eight Servants at a Time: But being a young ſingle Man, and much ſubject to ride abroad, it gave his Domeſtics an Opportunity of frequently viſiting ſome ill Neighbours, who made it their Study to plot, and make alluring Propoſals to them, in order to entice his Servants to imbezzle his Liquors, Victuals, and other Things; which, by their Maſter's Abſence, they had great Opportunities of doing; and thus they had full Room to enjoy their Liberty in Rioting, and Staying out, and Coming Home at all Hours in the Night, for, theſe Servants being all cor-

corrupted, each other contributed his or their Endeavours to facilitate the Entrance at any Time of their Fellows, unknown to their Maſter: And thus they went on for a conſiderable Time, till his Loſſes brought him under a Conſideration how to repair his late bad OEconomy; and he ſo well conſidered his own Caſe, as to cauſe him to make a thorough Reformation among his Servants, by turning away thoſe who were the chief Aggreſſors, and laying ſuch a Charge on others, as kept them within the Bounds of their Duty, ſo that none durſt afterwards hold any Acquaintance prejudicial to their Maſter's Intereſt. Accordingly, this Gentleman ſoon experienced his valuable Alteration, by the daily Recovery of his Loſſes; which made him become ſo tenaciouſly ſtrict, that, if any Servant was known by him to hold any cloſe Correſpondence with any Neighbour, he was turned away: Nay, if he was ſeen to talk needleſly with any out of the Family, he was called to an Account for it. But this was not all, for he carried his Care a great deal further; he had all his Glaſs-Bottles caſt with his Name and Place on them, ſo that it was in vain for his Neighbours to pilfer any of them. The next Thing he reformed, was the Keeping the Keys of his Houſe in his own Cuſtody, as he had them conſtantly brought up every Night into his Chamber, declaring he would ſuffer no one of his Servants to be out after Nine o'Clock at Night, unleſs it was on his own Buſineſs; if they were, they were kept out; and, if ſuch a Fault was repeated more than twice, they were diſcharged. All which, with ſeveral other Branches of good Management, proved a Reſtorative to his Purſe, inſomuch that the ſame Gentleman holds at this Time, 1742, ſome of his own Land in his Hands, and enjoys above a Thouſand a Year, under the Character of a very worthy Gentleman.

FINIS.

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THE

THE

MODERN HUSBANDMAN

For the Month of *November*.

As the laſt and this are two chief Months for ſowing Wheat-ſeed; ſowing and ſetting of Acorns, Beech, Maſte, Walnuts, Cheſtnuts, Filberts, and many other Seeds; for planting and tranſplanting Timber and Fruit-trees; and for preparing Lands againſt the next Spring-ſeaſon, for ſowing therein Beans, Peaſe, Thetches, Barley, Oats, Turneps, artificial Graſs, and other Seeds, I am in this Monthly Book led to make Obſervations on the ſame; and accordingly ſhall write on many uſeful experienced Matters relating to theſe Parts of Huſbandry, by doing my Endeavour to inform Farmers and Gentlemen, what has been, and what may be done, to anſwer thoſe two great deſireable Ends, Profit and Pleaſure. And firſt, I ſhall begin with an Account of ſowing a proper Wheat-Seed, in a proper Soil and Situation, viz.

CHAP. I.

Several curious Caſes relating to plowing and ſowing Wheat in this Month.

HOW *to make Choice of a right Wheat-ſeed for ſowing it, in this Month, in a proper Soil and Situation.* — In this as well as laſt Month, Wheat-Seed ſhould be ſown in ſeveral Shapes of the Earth; for, according to its Nature and Situation, ſo ought the Seed and Workmanſhip to be applied; therefore in all this Month ſow white or red Pirky-wheat, and not red, yellow, or white *Lammas*-wheats; becauſe theſe three laſt, if ſown late, it is a Chance if they do not ſtrike or mildew, to the very great Damage of their Crops, when the two former often eſcape ſuch Damage. The Reaſon of this I have publiſhed in my former Works; but as I have here the ſame under Conſideration, I ſhall farther enlarge on this Matter. Whereas the Kernels of the *Lammas* Sort grow at ſo great a Diſtance in the Ear, as to give Mildews, and other Blightning-Cauſes, large Room to ſettle and make a Lodgment; when the Pirky-Sorts are free of much Prejudice from them, by Means of the cloſe Standing of their Corns. The next Reaſon is, if the *Lammas* Wheat is ſown late, conſequently it will be late before it is in its green Kerning and Bloſſoming Condition; and then it is more than ordinary liable to ſuffer by the before-mentioned Accidents, becauſe Mildews and Blights for the moſt Part happen rather later than ſooner in the Summer-time; and then, when they meet with Wheat, growing in a long lank Ear, and in a green Stalk

Stalk and Ear, it frequently ſuffers by them. Not but that there are other concurring Accidents that may contribute towards damaging *Lammas* Wheats: But few or none ſo capital, as late Sowing, to their wide ſet Ears and tender Natures. I think, I have wrote ſo largely on the Character of Wheats in laſt Month, that I have the leſs Reaſon to proceed on the ſame Subject in this; yet, leſt ſome ſhould become Readers of this, and not of the laſt, I ſhall add the following Account of.

Ayleſbury *Pirks, the beſt Sort for late Sowing.*— This Wheat is the beſt Sort of all others, to ſow late both in Tilth-grounds and in Graſs-Lays, for its great yielding Hardineſs, and Value. It is generally ſaid to yield five Buſhels off an Acre more than moſt others, and will grow on dry, poorer, and wetter Land, better than moſt Sorts; will reſiſt Blights and Mildews beyond any, except the bearded Wheats. In ſhort, though Pirky-wheat has been ſown many Years in our *Chilturn* incloſed Country, yet this *Ayleſbury* Sort is accounted, with us, a new Species; coming to us for the very firſt Time about the Year 1734. And now I, and many others in our neighbouring Parts, have it growing in different Soils, and therefore can furniſh a Farmer, or Gentleman, with any Sort of Pirky-wheat, for ſowing it in ſuch an Earth as is moſt agreeable to its Nature: If they want to ſow it in Chalks, Sands, Sandy, or dry Loams, I can ſend that which grew on Clays: Or, if they want to ſow them on Clays, I can ſend them that which grew on Chalks, and ſo others, for their greater Improvement. In the Years 1740, 41, and 42, there were great Quantities of *Lammas* Wheat ſtruck, when the Pirks eſcaped much better.

The Benefit of ſowing Wheat late. —— As for thoſe Stubbles that you intend to ſow with Wheat, and you could not get their Soil fine enough in

laſt Month, continue their Plowings till the Beginning, Middle, or latter End of this Month; for you may likely get them ſo by theſe Times, for ſowing them with Wheat-ſeed; but be ſure to dreſs ſuch Ground for a Hitch-Crop well; if double, the better; by ſo doing, the *Chilturn* Farmer ſtands a Chance of having ſometimes a better Crop, than if he had ſown ſooner; becauſe it may happen again, as it did in the wet Summer of 1735, when the Rains waſhed off the Bloom of the forward ſown Wheat, and miſſed that which was ſown in *November*, *January*, and *February*, as I have Reaſon to remember; for that Wheat, which I ſowed even on the tenth Day of *February*, proved the beſt Crop I had. It alſo often happens to the Farmer's Intereſt, to ſow his tilth Crops early in this Month, where his Land is of the light, dry Sort, becauſe it will in Courſe be freeſt of Weeds; for in *September*, after the laſt Stirree-time, the Horſe-gold and Poppy appeared in many *Chilturn* Grounds; therefore, if Wheat has been ſown then or in ſome Time after, conſequently the Weeds would have come up with the Wheat or in a little while, and perhaps have kept Company with the Grain till it had ſpoiled great Part of it. But by plowing the Ground in laſt Month, and ſowing it in this, it is very probable, the Wheat will come up and remain free of thoſe deſtructive Weeds to the laſt. To this I add, that Ground in this Month is commonly under a ſufficient Moiſture, and then the Grain will ſtand faſter, and the Earth lie cloſer, to its greater Advantage. If Wheat is ſown late in this Month, ſow it (as I have wrote) thick, eſpecially if the Ground is rough and ſour, becauſe what you ſow, in this Month, you muſt not expect it to gather and branch much, nor that it will all grow up; whereas what Wheat-ſeed you ſow in a fine Tilth in *September* and *October*, that has been well

well dreſſed, it will gather, branch, and throw up more Stalks than Kernels ſown, notwithſtanding a leſs Quantity of Seed is made Uſe of then, than in this Month: Therefore, where two Buſhels of Wheat-Seed were ſown in the Middle of *September*, two and a Half, or two or three Pecks, ſhould be ſown in this Month, that there may be an Allowance made for the Loſs of ſome of the Seed by its being buried, by the Heavineſs of the moiſt Earth, and for ſome, that, in Courſe, will be devoured by Field Fowls; who at this Time of the Year will be more than ordinary voracious after ſuch Food, by Reaſon moſt other Wheat will now be under the Growth of its green Blades. But Wheat may be ſown too late in this Month, as I am going to ſhew.

How Wheat may be ſown too late.— This Month is rather too late to ſow Wheat on Clover-lays on one Plowing only; not but that many do ſo altho' they run a Hazard of having the Froſts overtake it, and cripple it, before it has got a ſufficient Root and Head to withſtand them. But the chief Danger attending latter ſown Wheat ariſes from the *chipping Part* of the Wheat as we call it in *Hertfordſhire*, which is this: When ſuch Wheat is ſown ſo late that its Chipping or Sprouting meets a hard Froſt, then much of it is in Danger of being killed by it. And, indeed, this Misfortune often overtakes ſuch an ignorant Farmer, as ſows Wheat the latter End of this Month in poor Ground, and eſpecially where little or no Dreſſing has been laid on before; and alſo on Clover-Lays, becauſe where Wheat is harrowed in on only one Plowing up of any Graſs-Lay, the hard Cruſt, or Bottom, cauſes the Seed to lie ſhallow, and the more expoſes it to the Beaks of Fowls and Froſts; and it was partly on this Account, that a Farmer was

diſ-

diſcouraged ſowing Wheat-Seed late on a Clover-Lay, according to the following Account, *viz.*

How a Farmer refuſed to ſow a Clover-Lay late with Wheat-Seed. — It was at *Michaelmas*-Time, that a Farmer, at *Dagnal*, in *Bedfordſhire*, within a Mile and a Half of my Houſe, took Poſſeſſion of a Farm, and being a new Tenant, with a great Deal of Buſineſs to do at Entrance, he had not Time to plow up a Clover-Lay that he came to, and therefore could not get it ready for ſowing Wheat in the ſame; and, when afterwards he had more Leiſure in this Month, he thought the Ground would be too ſour, and the Wheat expoſed to the Spoil of Birds and Froſts, to come to Profit; on this he came to a Reſolution of giving the Clover-Lay one Plowing in Broad-Lands, and let it lie all the Winter for the Turf and Roots of the Clover to rot, till *February* following, when he harrowed the Surface plain; and, after it had lain ſo about a Fortnight, he ſowed Horn-Shavings all over the Ground, and plowed them in croſs the laſt Way of Plowing; then he immediately ſowed it with Peaſe, and it proved a vaſt Crop; for this Grain, in particular, loves both a hollow Earth and a hollow Dreſſing, as I intend in that Month more particularly to make known.

Why more Wheat-Seed is to be ſown in wet than in dry Weather, &c.— In Clays, Loams, and in moſt other Soils, there ſhould be Half a Peck of Wheat ſown more on an Acre in a wet Seaſon than in a dry one, becauſe there ſhould be Allowance made for burying ſome of the Seed, eſpecially in this Month, when the Ground is generally ſugged by Wets. The ſame Conſideration, for late Sowing, ought to be duly regarded, and more Seed allowed; for by theſe two Impediments of ſowing Wheat in a wet and late Seaſon, and by the Damage of Worms and Slugs which ſometimes happens, a con-

conſiderable Part of the Seed may perhaps be loſt, and therefore ſome ſow three Buſhels in this Month, inſtead of two and a Half, which they ſowed in laſt Month.

To ſow Wheat in wet Loams and Clays in this Month.— Theſe Soils, beyond Diſpute, ought to be ſown in *September* or *October*, to give the Wheat an Opportunity to acquire a ſtrong Root and Branch betimes, for reſiſting the Violence of Winter and Weather; but through Multiplicy of Buſineſs, or the Inclemency of the Seaſon, the Farmer may be caſt, and be behind in ſowing this Soil, till the Beginning, or latter End of this Month; and then there muſt be an Alteration, as I ſaid before, in the Quantity of Seed. In the bluiſh Clays of *Ayleſbury* Vale, their Rule is, to begin Sowing at *Michaelmas*, and then they ſow ſomething more than three Pecks of Wheat on a Half-Acre Land, Broad-caſt, twice over the ſame, and plow it in with their Foot-plough. But, if they ſow a Land late in *October*, they ſow four Pecks; and if they ſow the Half-Acre in this Month, any Thing late, they ſow five Pecks on that Quantity of Ground. In our reddiſh, loamy Clays, about *Gaddeſden*, we ſtrive to ſow our firſt Wheat-Seed; and, if this happens to be in *September*, two Buſhels on an Acre ſometimes prove ſufficient. If in *October*, two and a Half; if latiſh in this Month, three are but enough, and then we ſow it by ſpraining the Seed out of a Man's Hand in two Bout-Lands. In the yellow and red Clays about *Edgware*, *Hendon*, and *Acton* in *Middleſex*, they begin at *Michaelmas* to ſow their Wheat-Seed in three and four Bout-Lands, which ſometimes is ſprained in, and ſometimes ſown Broad-caſt, and plowed in with their Swing-plough; if in the firſt Method, the Wheat comes in Rows, and always appears ſo till near Harveſt, and then it looks moſtly all alike. About

bout *Acton*, and near *London*, they ſow all red *Lammas* Wheat, for the Sake of the Straw, as well as the large Body of this Corn; but, about *Buſhy*, they ſow their Wheat-Seed in a Mixture of red and white Wheat, or *Lammas* red and pirky Wheat, and ſeldom fail of beginning to ſow in *September*, and finiſh in *October*. But that Ground, which they hitch, that is, when they ſow their Bean-ground with Wheat, they are obliged to ſow it late in *October*, or early in this Month, as I am here going to obſerve.

How a Field, near the Hyde *in* Middleſex, *was ſown with Wheat after a Bean-Crop.*— Near the *Hyde*, they plowed up a Bean-Stubble, as ſoon as the Horſe-beans were got off (which grew in four Bout-lands) into Broad-lands, croſs the laſt Way of plowing. Then, in a little Time after, they harrowed all the Ground plain, and on the ninth Day of *October*, 1742, I ſaw them uſing their Swing-plough, in plowing the Ground croſs the laſt Method, into four Bout-lands, according to the Courſe of the Earth's Situation, in which the Drain lay. The next Time, they told me, they would plow the Field in the ſame Shape; that is, by plowing it in four-bout Lands, the ſame Way it lay laſt in, with this Difference, that they will make a Ridge where the laſt Thorough was; and it is here they ſow their Wheat-Seed broad-caſt, and plow it in. But this Operation could not be performed intirely very ſoon, becauſe here were three ſeveral Plowings given to the Land, after the Bean-Crop was off; which obliged the Farmer to ſow it late in *October*, or the Beginning of this Month, and then he allowed his Quantity of Seed accordingly. About three Miles more towards the North-weſt, the Ground ſo varied, as to require a different Management in the ſowing Wheat-Seed, as follows, *viz.*

How

How a Field, that had been ſown with artificial Graſs-Seeds, was plowed up near Buſhy-Common, *and ſowed with Wheat.*— The ſame Day, as I was riding Home from *London*, I ſaw a gravelly, loamy Field, joining to *Buſhy-Common*, plowing up; which induced me to ſtop my Horſe, and diſcourſe with the Plough-man of what he was about to do. He told me, this incloſed Field had been a Lay of artificial Graſs, and that he was then giving the Ground a ſecond Plowing, in Order to ſow it with Wheat. The firſt Plowing he performed was thus done: As the Field lay in Broad-lands, he firſt of all filled in his Thoroughs with the two-wheel *Hertfordſhire* Fallow-plough; next, he ploughed all the Ground a-croſs into Broad-lands again with the ſame Plough; then he harrowed it plain, and the ſecond Time he plowed it croſs the laſt Way into Broad-lands with the ſame Plough as before, which, when he had harrowed plain, he plowed it the laſt Time the latter End of *October*, or in the Beginning of this Month, with the Foot-Plough, and ſowed Wheat-Seed in two or three Bout-lands. This Management ſhews the Diſcretion and Art of this Farmer, who rightly adapted his Plowing to the Nature of the Soil: For, though all around this Common they uſe only the Foot or Swing-plough, yet, as his Land is a gravelly Loam, and the circular adjacent Lands are a clayey Loam, he made uſe of both Wheel and Foot-ploughs.

How Wheat, ſown in two-bout Lands, one Year, out-did that ſown in three-bout Lands. —— *And how Wheat, ſown next Year in three-bout Lands, out-did that ſown in two-bout Lands.*— This Caſe happened between *Uxbridge* and *Amerſham*, in their mouldy Gravels, where they begin to ſow Wheat in *September*, but carry it on to ſome Time in *November*, either by Tilth-plowing, or by plowing up

Lays of Graſs. Thus: *Firſt*, as to their Soil; it is, in many Parts of this Country, a poor gravelly Sort, let for a Noble an Acre, which they uſually, as often as they have an Opportunity, lay down with either Clover, Ray-graſs, or Treyfoil, and very often they ſow all three together, for feeding their Ewes to ſuckle Houſe-Lambs; which, on this Account, does Abundance of Service to this Land, by reſting, refreſhing, and getting it into good Heart againſt Wheat-Seaſon, and thus ſaves their Farmers a great Deal of Expence in the buying of Manure, or Dreſſing. But this they are apt to carry too far to their Loſs: For *Secondly*, as to their Dunging this Ground, they ſeldom lay any other Dung on it, than what they make in their Stable and Farm-yard, becauſe they flatter themſelves, that this alone, with the Freſhneſs of the Earth, is ſufficient to enrich it, and make it bear two Crops of Corn well, before it is laid down with Graſs-Seeds again: But the Effects prove them in a Miſtake. It is true, that thoſe, who thus dung their Ground, get ſometimes twenty or five and twenty Buſhels of Wheat off one Acre; but, by making Uſe of always only ſuch Yard-dung, their Land becomes tired with it, and returns very often not twenty Buſhels of Wheat off one Acre. Yet theſe Farmers fare better than ſeveral others of them, who truſt altogether to the Freſhneſs of their gravelly Soil, and ſow their Wheat without any Dreſſing or Manure at all; becauſe they think, if their artificial Graſs lies two or three Years before it is plowed up, it is ſufficient to get their Ground in Heart for ſowing it with Corn; but the Conſequence commonly is, that ſeveral of theſe Farmers get no more than ten or fifteen Buſhels of Wheat off an Acre, and *Lent* Grain accordingly. For here they do not dreſs their Ground with the Fold, becauſe they ſuckle Ewes, and rarely lay out any Money

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in Soot, Horn-ſhavings, Malt-duſt, Rags, or any other Manure, though they lie near *London*. *Thirdly*, as to their Plowing and Sowing, they generally proceed thus: They fallow with the two-wheel *Hertfordſhire* Plough, or with the two-wheel Bob-tail-Plough; and with one, or both theſe, they plough two or three Times more, to get their Land into a fine Tilth. And when it is ſo, and lies in Broad-lands, then, with their two-wheel wood-chip Plough, they plow and ſow their red pirky Wheat in three or four-bout Lands, and ſometimes in two-bout Lands; but, when they ſow Wheat in this laſt Form, they are forced to make Uſe of the two-wheel narrow Wheat-Seed Plough. If they ſow Wheat early in *September*, they ſow two Buſhels and a Half of Seed: If in this Month, three Buſhels. It was in 1740, that one of their Farmers ſowed Half a Field in two-bout Stitches, and the other Half in four-bout Lands. When they ſow Wheat in Two-bouts, a Man ſprains it out of his Hand; if in Four-bouts, they ſow it broad-caſt on the rough Ground as the Plough leaves it, and then immediately harrow it in; by which Management, the Wheat grows in the Water-thoroughs, almoſt as well as in the four-bout Lands; and the ſame, in the Thoroughs of the two-bout Lands, contrary to the wet, clayey four-bout Lands in *Middleſex*. But what I write this Chapter chiefly for, is, to ſhew, that good Crops do not altogether depend on the Mode of Sowing and Plowing; for that Wheat which was ſown in the two-bout Lands, above-mentioned, beat that which was ſown in the four-bout Lands in the Largeneſs and Thickneſs of the Wheat-Crop, becauſe the Winter and Spring proved mild, dry Seaſons; but when it has proved a very froſty and wet Winter, and Spring, then the four-bout Lands have beat the two-bout Lands.

How a bad Workman plowed Wheat-ſeed into two Bout-lands, to the great Damage of his Maſter.— This actually happened in the Pariſh of *Gaddeſden* in *Hertfordſhire*, in the Month of *October*, 1742, where a Piece of arable Land was prepared from *April*, forward, by the Wheel Fallow-plough, in order for ſowing it with Wheat; but the negligent Maſter ſuffered his Land to lie without Plowing, from *July*, to the Beginning of *October*, which gave the Weeds a Leiſure to grow up; and they grew and multiplied ſo much, that, when they came to plow it the laſt Time, it had all a green Face. Now it was the Beginning of laſt Month, that they began to ſow this Land, a loamy Gravel, with Wheat, in two-bout Stitches; and the Ploughman, that was hired at *Michaelmas*, proving a Novice in the Art of Plowing, he plowed the Stitches ſo crooked and ſhallow, as not to cover all the Wheat-ſeed, that was here ſprained in by a Man's Hand, which gave the Birds Room to devour a conſiderable Deal of it, the Froſts to hurt ſome of the reſt, and the Weeds to grow up and choak great Part of the Wheat-crop: However, this gave Occaſion to ſome of the better Workmen in the Neighbourhood, to make their Games, and ridicule the young Ploughman, who left a Monument in the Field, for ſome Time, of his Ignorance, and his Maſter's Negligence, in ſuffering it to be ſo; which puts me in Mind of a bungling *Middleſex* Ploughman that I am going to take Notice of.

The Value of a skilful Ploughman exemplified, by the great Loſs that an ignorant Ploughman may occaſion the Farmer his Maſter.— It was on the aforeſaid ninth Day of *October* 1742, in my Journey Home from *London*, that I ſaw a Field of Turneps near the *Hyde*, whoſe Seed had been ſown and harrowed in four-bout Lands. This Field lay at ſome Diſtance from the main Road, but in full View of

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Paſſengers, who might eaſily ſee the moſt crooked Work of Plowing, I believe, that ever was ſeen. On this, I aſked in the Neighbourhood, whoſe Field it was; they told me a Farmer's, who had a Man that little underſtood Plowing: A fine Credit for a Maſter, to keep one that ſhould be the beſt Workman about his Farm, and is the worſt, perhaps, of all. And then ſuch a Ploughman, in Courſe, leaves the Water-thorough larger in ſome Places than others, which may occaſion the Rains, in their Deſcent, to waſh Holes in the Sides of the Lands: And in Caſe Wheat is ſown after this Manner, the Side, or laſt Furrow of ſuch crooked Land, cannot be rightly plowed or laid even, nor the Wheat-ſeed regularly covered, nor kill, nor prevent the Growth of Weeds, *&c.* By theſe two Examples, it may plainly appear, how valuable a good Plowman is to a Farmer, towards his obtaining the greater Crops of Corn, or artificial Graſſes: For, ſuppoſe a Ploughman was to plow twenty or forty Acres of Land in one Wheat Seaſon, but I will ſuppoſe only twenty, he may be the Cauſe of making his Maſter loſe ten Buſhels of Wheat on each Acre: However, if it is only five, and thoſe five be worth twenty-five Shillings, there will be near a Loſs of twenty-five Pounds in one Year; and this only in the Article of Wheat, without reckoning a proportionable Damage in the *Lent* Grain: But if ſuch a Loſs was to be doubled, as it certainly has been, then there would be a Loſs with a Witneſs, perhaps to the Undoing of the Farmer. I own, indeed, that in making Wheat Stitches, or Bout-Lands of any Sort, will try the Skill of the Ploughman, becauſe it is the moſt difficult Work of all Plowings; and he, that is a Workman at this, need fear no Sort of Plowing whatſoever; for, in the making of two, three, or four-bout Lands,

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both Wheel and Foot-ploughs are commonly employed. And, therefore, I know a famous Farmer, that rents, I am told, above eight hundred a Year, and who occupies the three-wheel Drill-ploughs; when he wants to hire Ploughmen, he comes into *Hertfordſhire* for them, as knowing we have as good, if not better, than any other County has, becauſe here they ſow their Corn in Broad-lands, and in Bout-lands, for *Hertfordſhire* is chiefly a Corn Country: Not but that there are many bad in it, as well as good ones; for, as common as this Art is, ſome can never attain to be Maſters of it: Nay, I believe I may affirm it to be Truth, that there is hardly one in ſeven, or ten, that is a right Workman. In the Pariſh where I live, there was a ſmall Farmer, who had been brought up from his Cradle to the Huſbandry-Buſineſs, that could ſeldom ever hold the two-wheel Plough, ſo as to plow a ſtraight Thorough or Furrow: And it is certain, that he, that cannot, muſt miſs Plowing ſome of the Ground, which is what we call *Baulking it*; and then the Weeds grow up, and the Crop, in ſome Part of it, ſuffers, as it commonly happened in this Farmer's Land, which he had rented near fifty Years, but never, it is thought, plowed it clean. It was in the Year 1740, that I ſent my Son and Team to plow one of this Farmer's incloſed Fields, of three Acres; and, though he had dunged but one Acre of it, yet, by the Judgment of the Neighbours, he had the beſt Crop of Wheat that ever he had in his Life; becauſe (humanly ſpeaking) my Son, whom I brought up from his Infancy to the Plough, and is now deemed one of the beſt Workmen our Country affords, plowed his Ground the laſt Time thoroughly well, went to the Bottom of the Roots of Weeds, turned up freſh Mould, that had not been expoſed to the Sun and

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Air for many Years before, laid the Thoroughs even, and covered the Wheat-ſeed every where; ſo that the Stitches, or two-bout Lands, made by the two-wheel Plough, appeared in a moſt regular Form, not too big nor too little, nor too high nor too low. But the Punctilio, that the *Hertfordſhire* Ploughman ſtands moſt on, is his Ability in drawing out a firſt ſingle Thorough, as ſtraight, almoſt, as if a Line was laid for his Guide; and this for ſixty, or more Poles in Length, only by the Help of a Mark in a level Piece of Ground, which is commonly a Piece of white Paper ſtuck in a ſlit Stick, or a Piece of Fern, or Bough, for directing his Eye to the Land's End, where the Stick ſtands erect. But where Land lies uneven, and he cannot well ſee the Mark to the End of ſuch a long Shot, he then erects two or three ſuch Marks for this Purpoſe, in order to his making ſtraight Work afterwards; for on the drawing out ſuch his firſt Thorough the reſt of the Broad-land, or Stitch, true Work very much depends. But, to further illuſtrate the Value of a good Ploughman, I ſhall proceed as follows.

How a Ploughman is eſteemed about Cheſham *in* Buckinghamſhire. — Hence it is, that a good Ploughman is in ſuch Eſteem, that about *Cheſham* in *Buckinghamſhire* (a great Market-Town, lying twenty-five Miles diſtant from *London*) the beſt Sort of them has ten or twelve Pounds a Year; becauſe this incloſed Part of the Country, for the moſt Part, conſiſts of a reddiſh Clay, mixed here and there with ſome large Stones, which renders this heavy, ſtiff, ſtony Ground very difficult to a Ploughman, for his making good Work; inſomuch that, if a Plowman is not very acute in ſetting his Geers, or Tackling, and raiſing and lowering his Share-point, in a moſt ſhort Space of Time, and can guide his Plough ſtraight, he is not fit to hold

Plough

Plough in this Soil, in theſe Parts. And as I am now on the Subject of Plowing in this Country, I ſhall publiſh the Conduct of a great Yeoman, or Farmer, who very lately lived here, and acquired a conſiderable Eſtate by his cloſe Management and Living, with reſpect to his Ploughman: It was thus:

How a Yeoman, lately living near Cheſham, *got a conſiderable Eſtate by the managing his Land, better than moſt of his Neighbours, and of his Uſage towards his Ploughman.*— This Perſon was well known to all in theſe Parts, to be a moſt diligent, ſkilful Huſbandman; and ſo eager was he in this Buſineſs, that he followed it up beyond moſt of his Neighbours, particularly with Regard to his Ploughman, for his Way commonly was, to get two Teams of Horſes ready for working one Plough in one Day, by one and the ſame Ploughman. Accordingly, the Maſter obliged him to riſe every Morning ſo early, as to eat his Breakfaſt by ſix o'Clock, and to ſet out at that Hour with his Horſes and Driver, to work till twelve o'Clock; and then the firſt Team was ſent Home, and another came into the Field in its Room, that worked till ſix o'Clock. In the mean While, the Plowman and Driver eat a running Dinner, with little or no Loſs of Time, in order to enjoy the better Supper. But this long Service would not take with every Ploughman, becauſe it is beyond the Cuſtom of the Country, which enjoins the Ploughman to go only eight Hours. However, notwithſtanding this, he carried on the ſame Work Year after Year; and that he might do it with the greater Satisfaction, he conſtantly hired young Ploughmen, making a Bargain with them at the ſame Time, for their cloſe attending the Plough in the Field, as long as I have mentioned; for he was ſenſible, an old Workman was likely to diſpute his Orders, and ſhuffle

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in his Work to his Prejudice. In ſhort, this Yeoman having a very large Farm of his own, Maſter of a good Judgment, and Money at Command, he wanted neither Manure, nor good Work done; which ſo increaſed his Fortune, that he lately died a very rich Man. From all which Diſcourſe of a Plough-man, it is my Intention to make known the Difference between a good and bad Workman; becauſe ſeveral Gentlemen have wrote to me, to help them to a Plough-man; but when I let them know, that ſuch a one, of my Recommendation, is worth eight or ten Pounds a Year, they ſeem ſurpriſed, as thinking it an Impoſition, conſidering how much cheaper they can have one in their own Country: Whereas, if they were truly ſenſible of the Merit of ſuch a true Workman, I am perſuaded, they would rather give him that Sum, than five or ſix Pounds a Year to a worſe. But what would the Conſequence be, if I ſhould ſend them one of this latter Sort? Why, it is ten to one odds, but the Gentleman, or Farmer, finds him a diſagreeable, unprofitable Bungler, and then brands me with an infamous Character for my Pains; without conſidering, that the Penny ſaved, in obtaining a good Plough-man, is the worſt Money he can ſave in all the Expence of Farming. Therefore, if any Gentleman thinks fit to ſend to me for this, or any other Man-Servant neceſſary in any of the Branches of Farming, I will uſe my beſt Endeavours to ſerve him, at any Time of the Year; for, in our Parts, it ſeldom happens but one or other is out of Employ, and would willingly enter into a good Service; and they may depend on it, they ſhall have the genuine Character of him, as I have it from where he laſt lived: And if I can ſend ſuch a one, as I did to a Gentleman in *October* laſt, 1742, I deſire to ſend no better, for Honeſty, Diligence, and Skill in Farming Affairs.

How to ſow Wheat-Seed in the Broad-land Method to the greateſt Advantage. — If you are to ſow Wheat-Seed ſo late as in this Month, as many do, either after a Crop of Turneps are drawn, or eaten off, or after a Crop of Cole or Rapes are pulled or eaten off, or on one Plowing after a Crop of Barley, Oats, Peaſe, or Beans are got off, or after a Crop of Clover is mowed or eaten off, *&c.* then the Mode of ſowing Wheat-Seed ſhould be altered from what was practiſed in the preceding Months of *September* and *October*. And this, more eſpecially, when your Earth is in a thorough, fine, tilth Condition. Then, I ſay, you ought not to harrow the Ground after the laſt Plowing, before the Wheat-Seed is ſown, as uſual; for if you do, and then ſow and harrow in your Wheat-Seed, it will lie ſo ſhallow, as to be very much expoſed to the Beak of Field-Fowls, who will be more than ordinary voracious at this Time of Year, and carry off, perhaps, the greateſt Part of the Seed, and then where will the Tenant find a Pay-rent Crop at Harveſt; and this, becauſe moſt People have done ſowing their Wheat. And if I ſhould ſay, moſt Wheat, in this Month, is in its green Blade, I ſhould not enlarge: Therefore, as there is now little Food left in Fields for Rooks, Crows, and other Birds, they will certainly become hard Labourers for filling their Craws with ſuch latter ſown Wheat-Seed. On this Account, then, it is, that Wheat-Seed ſhould be ſown on the rough Broad-land, as the Plough left it, and then harrowed in; for, by this Means, it will be much more ſecurely covered from Fowls, than if the Ground was firſt harrowed and then the Seed ſown and harrowed in. In poor Ground, more Seed ſhould be ſown than on rich; becauſe rich Ground will cauſe moſt, or all the Seed, to grow, and very much branch, when poor Ground will cauſe ſome of it to die, and little to gather and branch. And remember, that all Broad-

Broad-lands, eſpecially, ſhould be ſown in a dry Time, becauſe, if they are ſown in a wet one, the Horſes Feet, by preſſing down the Ground, will leave ſuch a Hollow, as to let the Water ſtand in it; and then the Seed, ſown in the ſame Spot of Ground, will very likely rot. Theſe Precautions are ſo neceſſary for warning Gentlemen and Farmers againſt ſuch wrong Managements, that, if I do not write them, I think I ſhall do Injuſtice, not only to the Tenant and Landlord, but to the Nation in general; becauſe all are concerned in the Produce of plentiful Crops of Corn: However, for inculcating the *Memento* of this Knowledge more emphatically, I may, perhaps, give a Handle to ſome ſneering Critic, to make Obſervations on my being guilty of Tautology, by writing twice on the ſame Subject; but this, I hope, the candid Reader will not grudge me the Liberty of, if it ſhould be ſo; ſince, as it is intended to promote both a private and public Good, it may be the eaſier diſpenſed with from a Farmer; for there are two Reaſons for writing more on the Subject of Broad-land Plowing and Sowing: One is to make good ſome Omiſſions that happened in the two proceding Months; the ſecond is to give Directions according to the Seaſon of the Month, that requires different Management from the former; and, therefore, I ſhall proceed.

Of ſowing what is called Sugar-Plum Land *with Wheat.*— To define the Nature of this Sort of Earth is what my Reader, I ſuppoſe, eagerly expects, from the Oddneſs of its Character; and therefore I have to tell him, that this is a thin, ſhort, chalky Surface, which commonly lies on a Hurlock or Rag-ſtone; that is to ſay, a whitiſh, hard Subſtance, between a Chalk and a Stone, which is of a moſt hungry Nature, readily receiving and conſuming the Aſſiſtance of any Manure,

by letting the Juices, or Waſh, eaſily run into and through its many Joints, and hollowiſh Body. Of this Soil, there are great Numbers of Acres in *Bedfordſhire*, *Buckinghamſhire*, *Hampſhire*, *Wiltſhire*, *Dorſetſhire*, and in other Parts of *England*. Near me, there is a poor Sort of this *Sugar-Plum Land*, as they call it, lying in the open common Fields under *Dunſtable Downs*, ſo poor, that the Tenants are obliged to let great Quantities of it lie two Years together fallow or idle; in which Space of Time, it throws up a little natural Graſs, that ſerves as Picking to their Folding Sheep, and this in order for it to get a freſh Heartineſs; which, with good Plowing afterwards, a rich Dreſſing, and a favourable wettiſh Summer, ſometimes returns plentiful Crops of Wheat, or Barley, or Oats, or Thetches, or Tills. But, previous to a Wheat or Barley Crop (for they do not dreſs for any of the reſt) they lay on rotten Dung, or Fold, or dreſs with Rags of woollen Cloth, or Soot, *&c.* which, as I have given a particular Account of in laſt Month, I ſhall deſiſt from enlarging on them in this, and only ſay, that they ſtand the better Chance of obtaining good Crops of Grain, when they do not ſow their Seed too ſoon, too dry, nor in too fine a Tilth. If they ſow too ſoon, and in too fine a Tilth, the Poppy, a deſtructive Weed, is very apt to grow next Summer, and cripple their Crop; if too dry, the Wheat is liable to lie hollow, and give the Froſts Room to enter, and damage the Roots of it. Therefore, this Ground, if in good Heart, is beſt ſown latiſh, and in a little Time after a great Shower of Rain has fell on it, that the Thoroughs may be turned by the Foot-plough, ſomewhat heavy on the Seed, with the chopped woollen Rags, firſt ſown over the Ground, for the Purpoſe of becoming a durable, warm, moiſt Dreſſing to the Wheat, which commonly is

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the pirky Sort, as beſt agreeing with this poor Soil; for the *Lammas* and bearded Wheats are not fit to be ſown here, becauſe it is too poor, too dry, and too looſe a Soil for ſuch heavy large Straw and eared Wheat. But nothing exceeds the Fold in this Earth, and eſpecially if it is made Uſe of after the Wheat is ſown; for then the Sheep tread it in, and ſo faſten it, as to cauſe the Crop in its full Growth to ſtand firm, when others fall to great Loſs, that did not enjoy this beneficial Aſſiſtance.

Sowing Wheat in white Clays, and in chalky Loams, &c.— There is a great Difference between Sugar-plum Chalk, and a Clay Chalk; for one is in a great Degree the Reverſe of the other. The firſt is generally ſown with a pirky Wheat, the laſt with either pirky or *Lammas* Wheat, under the Preparation of the Fold or rotten Horſe-Dung, or afterwards, with Malt-duſt, Oil-cake Powder, or Soot; for Rags are not ſo proper here, becauſe they beſt agree with a ſhort, dry Chalk, or gravelly Soil. A clayey Chalk requires to be ſown dry; for if Wheat-Seed was here to be ſown in a wettiſh Seaſon, and plowed in, the Stiffneſs of this Earth would bind it in, and be apt to bury a great Deal, by not letting the green Blade come through it; on this Account, ſome Farmers ſow this Soil in two-bout or other Ridge-lands, eſpecially where it lies low and moiſt. Where a gravel or reddiſh Clay is mixed with Chalk, they commonly ſow the yellow *Lammas*, as being a Wheat that thrives well in theſe Soils. Others ſow half Pirks and half yellow *Lammas*, that grow and agree very well together, both in the Field, in the Sack, and at the Mill. In ſome Parts, there is only a reddiſh Clay mixed with Chalk, as near *Cheſſum* in *Buckinghamſhire*, and then they call it a *Maumy-Soil*; that they ſow with *Lammas* or pirky Wheat, in two-bout Stitches, which often returns good Crops

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of Wheat and Horſe-beans, but is bad for Barley, or Peaſe. In the *Vale* of *Beaver*, in *Darbyſhire*, they have alſo, in Appearance, a red Clay mixed with Chalk, and a little gravelly; but this red Clay is different from that of *Cheſſum*, for here they look on it to be ſo much of the marly Nature, as to be one of the richeſt Soils in the Kingdom of *England*, and often returns moſt plentiful Crops of Wheat, Barley, Beans or Peaſe; for this is ſo rich a Earth, that it is fit for any Sort of Corn whatſoever; and as it lies low and wettiſh, they are forced to keep it always up in ridge Broad-lands, that they always plow one Way in their open common Fields, and never a-croſs. The richer and drier the Soil, the later it may be ſown with Wheat: But here I would be underſtood, that I do not lay that Streſs on the Fold where Wheat is plowed in, or ſowed under Thorough, as I do where it is harrowed in; becauſe, in the former, the Cover of the Earth, in a great Meaſure, ſecures it from falling down before, and when it is in its full Growth: But in the latter Way, the Fold or the Roll is abſolutely neceſſary to be made Uſe of for this Purpoſe to prevent it.

How a Farmer got the beſt Crop of Wheat, by ſowing the Seed in a chalky Soil in wet Weather, &c.—A Farmer, that was ſowing his Wheat-Seed in a chalky Soil in the Pariſh of *Ivinghoe* in *Buckinghamſhire*, was overtaken with a haſty Shower of Rain: However, this Journey at Plowing and Sowing, though a very wet one, was attended with greater Succeſs than the other Part of the ſame Field that was ſown in dry Weather, for Reaſons I have before given. A great Farmer living at *Arſon*, in this Pariſh, uſed to ſow moſt, or all, his white and loamy Ground, with Wheat in Broad-lands, becauſe he ſowed a great Quantity of Clover, and other Graſs-Seeds among it, that he dreſſed

ex-

extreme well, and ſowed his Wheat-Seed thick, and thereby got vaſt Crops both of Grain and Graſs, which prevented the Growth of the Twitch or Couch-graſs, and all other Weeds; but, to illuſtrate this Practice the more, I ſhall obſerve:

How a Farmer got Crops of Clover, by harrowing the Seed in with Wheat.— This Practice has proved ſo beneficial to a great Farmer, that he ſows Clover no other Way, alledging, he can be ſure by no other Means of getting Crops of Clover; for, if he ſows it in the Spring-time over his Wheat, the Froſts, Flies, or Slugs, are very apt to deſtroy it in its infant Growth: Therefore, when he harrows his Wheat-ſeed in Broad-lands, he at the ſame Time harrows in his Clover-ſeed; and by thus ſowing it in laſt, or this Month, the Clover gets a ſtronger Root than that ſown in *March* or *April:* Beſides, as Wheat is reaped and not mown, a greater Head of Clover may be left at that Time, than ought to be among Barley or Oats that are mown. It likewiſe happens, that Clover, by ſuch an early Sowing, will get ſo tall and thick a Head, as to ſhade the Roots of Wheat, forward its Growth, and kill all Weeds.

A curious Caſe, proving how a Farmer loſt great Part of his Wheat-crop by his Ignorance and Covetouſneſs.— A Farmer, near *Chaffon* in *Buckinghamſhire*, in the wettiſh Harveſt of 1740, neglecting to get in his Wheat while a fair Opportunity offered, it was catched in the Rain, which cauſed many Kernels in the Ears to ſpire, more or leſs; ſo that, when he had got it into his Barn, the Sheaves were very damp, inſomuch that the Corn heated, and proved to be mow-burned: However, as Wheat ſold then at a high Price, he was loath to ſell his bad Sort to buy good; and therefore, after preparing it in his Way, he ſowed many Acres of this Wheat, and it came up; but, with ſuch a

ſlender

ſlender Blade, as might indicate, to a ſagacious Farmer, it would be a poor Crop; and accordingly, it happened to be a poor one indeed, for, by the following Spring, very much of it died away; becauſe, though the Seed grew in the Ground, after it had ſpired before in the Field at Harveſt-time, yet, by ſuch Spiring, it loſt ſo much of the vital Property of its Roots; and therefore, when it ſtood in Need of all its priſtine original Strength, then there was only left Part of it, that cauſed the weakeſt Roots, or thoſe that had ſo ſpent themſelves by twice Spiring, as to die away. Now this Miſtake was glaringly apparent, by ſome Wheat-Seed, that a Neighbour of this Farmer adviſed him to buy at Market, and ſow it about the Beginning of this Month; which proved ſo good a Crop, as made him ſay, he would never more ſow Wheat-Seed that had firſt ſpired, or was mow-burned; for, indeed, if Wheat was got into the Barn without Spiring in the Field, and afterwards mow-burned, it ſpoils it for Sowing, as I am going further to prove by what follows.

How to know good from bad Wheat-Seed, in Order to make Choice of a right for Sowing.— As I ſaid all Wheat-Seed that is mow-burned, ſo I add here, if any Wheat-Seed is artificially dried by Fire, it is very liable to miſs in its Growth, or, at leaſt, to produce a poor dwindling Crop. Yet, as there is a great Deal brought to Market that has been under theſe two Caſes, it concerns the Buyer to make a narrow Inſpection, and refuſe all ſuch Wheat for Seed. If Wheat has been fairly dried in the Sun, it will bite dry and ſhort; but, if dried by the Fire, it will bite dry and tough, be ſhrivelled, have a diſagreeable Smell, and a deep browniſh Colour, for all artificial Heat, in any great Degree, is an Enemy to this Grain; becauſe, in ſome Meaſure, it draws forth the vital radical Vertue of the Seed. If Wheat-

Wheat-Seed has ſpired, it will be blackiſh at the Spire-End.

A particular Caſe, ſhewing how a Yeoman loſt almoſt all his Crop of Wheat, by ſowing Grandfire Wheat-Seed.— There was an incloſed Field, whoſe Soil was a ſtiff Loam, that was ſowed with Wheat-Seed, under a good Dreſſing and Plowing, which returned this Yeoman twenty Shocks off each Acre: But, three Years afterwards, the ſame Perſon ſowed the ſame Field with Grandfire, or three Years old Wheat-Seed; which proved ſo defective, that, at the next Harveſt, he reaped no more than four Shocks and a Half in the whole Field, that contained eight Acres, inſtead of eight-ſcore Shocks, or more, which he ought to have had, if he had ſown a right good Seed. Thus, this ignorant Man, through his Obſtinacy and Covetouſneſs, in ſparing to buy ſound Seed, became, not only an Enemy to himſelf, but alſo to the Nation in general; as there was a conſiderable Quantity of Wheat loſt, or not produced, which would have been, had he acted the rational Part of a good Huſbandman; but this Grandfire Wheat was too old by two Years, as I ſhall further illuſtrate.

How an Experiment was tried, by ſowing one Year old Wheat-Seed.— This was tried in Ground a little below *Dunſtable Wharton*, in *Bedfordſhire*, to prove how Wheat-Seed, of one Year old, would ſucceed. In order to which, the Farmer never brined it, nor limed it, but ſowed it naked, and there was a fine plentiful Crop, free of all Manner of Smut or Pepper-Wheat; becauſe thoſe light underline Kernels, that cauſe ſmutty Wheat, were ſo decayed, by keeping them ſomething above one Year, that the vital Part of them was decayed, and did not grow, and ſo the Seed of Weeds fared much in the ſame Manner. And ſuch Dependence have ſeveral Farmers had on the Benefit of ſowing one or two Year old Wheat, that I have known

them ſow it naked, without fearing a ſmutty Return: However, if ſuch Seed was firſt put into a Tub of Brine, or only clear Water, but one Hour, to ſkim of all the lighteſt Kernels and then to lime the reſt, it would be a much ſurer and ſafer Way. Old Wheat-Seed, of one or two Years, takes a firmer Root than the new, though it is longer making it.

A Caſe, proving how a Farmer loſt the greateſt Part of his Crop of Wheat, by the old Way of preparing Wheat-Seed by Brining.— A Farmer, in our Part of *Hertfordſhire*, ſteeped his Wheat-Seed a Day and a Night in Brine, but did not lime it, becauſe the Weather was diſcouraging for ſowing it; and thus it continued, which occaſioned it to lie a Fortnight in this Condition on the Ground without Lime; for, if he had limed it, the Corns would have ſprouted the ſooner, by its heating the Liquor in the Kernels Bodies: However, the Seed ſprouted before the Fortnight's End, and in that Condition the Farmer ſowed it, but had a moſt poor Return of Wheat the next Harveſt, for few of the Kernels grew. In this Caſe, I muſt own, the Farmer is not much to be blamed, becauſe this Misfortune was occaſioned more by Accident, than any Miſtake; and to ſhew that he was not of the ignorant Sort of Farmers. At the next Spring-Seaſon, after ſowing this Wheat-Seed, he harrowed Barley-Seed on his Wheat-Stitches, which took ſo well, that all Harveſt he had a very good Crop; much better than the Farmer I am going to write of (for his Wheat was killed by the great Froſt in 1740, on the Ridges of his Land, and therefore harrowed in Barley.)

Another Caſe, proving how a Farmer loſt his Wheat-Crop, by the ill Management of his Wheat-Seed. — A Farmer, according to the too common Way, ſhot his Wheat-Seed on the Ground; and after he had ſufficiently wetted it with Piſs out of the

the Chamber-pot, he limed it; but, before he could ſow it, the Rains fell, and obliged him to ſpread it thin on a Floor, where, after it had lain four or five Days, the Skin of the Wheat-Seed began to peel, and the Corn to ſprout: However, the Farmer ſowed it as it was, and had a very poor Crop in Return; yet not ſo poor a one, as the Farmer I am about giving an Account of.

A third Caſe, ſhewing how a Farmer, by Piſs-brining his Wheat-Seed, loſt his Crop by it.— Another Farmer, being diſappointed in ſowing his Piſs-limed Wheat, kept it in a Sack three or four Days together, which cauſed it to heat, ſkin, and Spire, to that Degree, that, tho' he ſowed it, none grew. Whereas, had this Seed been wetted with Brine, inſtead of Piſs, it would not have cauſed the Skin of the Kernels to begin Peeling, nor the Corns to ſprout in ſo little a Time; but the Farmer, in this Caſe, was guilty of two Miſtakes; one was, in making Uſe of Piſs, and the other, in letting his Seed lie confined in a Sack, which became the moſt ready Way to breed a Heat in the Seed, and cauſe the Piſs to ferment, and eat the Skin of the Wheat; but ſo obſtinately ignorant are many Farmers, even at this Day, in our Parts, that I know ſeveral that uſe this Method of throwing only Piſs on the Seed the ſame Morning it is to be ſown, and then immediately work it up with powdered Lime; but, if a Diſappointment happens, then the Danger enſues, as I have mentioned, and very likely a ſmutty Crop, if the Seed grows: More of this in the next Article of the double Plough.

How Wheat-Seed is ſown by the double Hertfordſhire *Plough to a great Advantage.*— By the foregoing Caſes, it may plainly appear, *Firſt*, How prepared Wheat-Seed may be ſpoiled by the Fall of Rains in Sowing-time, to the Farmer's Prejudice. *Secondly*, It may be by the ignorant Ma-

nagement of the Wheat-ſeed, as I have before ſhewn. And 3*dly*, By ſowing Wheat-ſeed by the two Wheel ſingle Wheat-ſeed Plough in two Bout-Lands, or Stitches. To prevent theſe three Miſfortunes, I ſhall here offer as many Propoſals. *Firſt*, to prevent prepared Wheat-ſeed being ſpoiled by the Fall of Rains, ſo that it can't be ſown preſently: Let ſuch Wheat-ſeed be directly thrown on a Ground, or boarded Floor, as thin as poſſible, and afterwards let it be turned with a Shovel, or otherwiſe, once every two Days; and then, notwithſtanding it has been brined and limed, it will be defended from that great Misfortune of ſprouting or ſpiring, two, three, or four Weeks together. The Rationality of what I here propoſe may be eaſily comprehended, when it is conſidered how the Maltſter ſtops the too free Spiring of his wetted Barley, which though it has been ſoaked ſeveral twelve Hours, or Tides, in his Ciſtern of Water; yet, by its ſhallow lying in the Couch, or on the Floor, and often turning it, he can either let it ſpire freely, or check it at Pleaſure. Thus ſuch Wheat-ſeed may be preſerved ſound ſome Time for ſowing it, when fair Weather permits. *Secondly*, the Wheat-ſeed may be damaged or ſpoiled by the ignorant Management of the Farmer, thus: No Piſs ought to be uſed in the Preparation of Wheat-ſeed for ſowing, becauſe its glutinous Quality cauſes its Salts to adhere and ſtick ſo faſt and cloſe to the Kernel's Body, as to corrode and eat its Skin, to the endangering and ſpoiling ſuch Wheat-ſeed, eſpecially, if after it is ſo prepared, the Farmer is obliged to keep it ſome Time before Sowing. If this ſhould happen, lay ſuch Seed as thin as poſſible, as I ſaid, on a Floor, and turn it often: Or, either waſh off the Lime, or ſcrub it dry off with a Broom as well as you can, for the Lime forces the ſalt Quality into the Wheat. *Thirdly*, it ſometimes

times happens, by Means of ſowing Wheat-ſeed with the two-wheel ſingle Wheat-ſeed Plough in two Bout-Lands, or Stitches, that a Shower of Rain falls in the Time of ſuch Sowing, and cauſes about two, or four Buſhels of Seed, to be damaged or ſpoiled. When only one of theſe Ploughs is uſed in ſowing, the Sower ſows two Buſhels of Wheat-ſeed, while the Stitches are drawing out, and a Peck afterwards in the Bottom of the Thoroughs or Furrows at the Henting up of the Stitches to finiſh them: But, as I ſaid, a Shower of Rain may fall in the Interval of Time, and thus hinder the Ploughman from being able, in a right Manner, to ſhut or hent up, and compleat the Stitches, whereby the Seed is expoſed to the Beaks of Fowls, and to the Waſh of Rains; and the more ſo, when two ſingle Ploughs are engaged in this Work at one and the ſame Time, which may cauſe a double Damage. To prevent this, where Ground is lightiſh and proper for it, the two-wheel double *Hertfordſhire* Plough may be made Uſe of to great Advantage, becauſe this Plough makes a four Thorough-Stitch at one Bout, and finiſhes it as it goes, which is doing double Work at one and the ſame Time, by only one Ploughman, one Driver, and one Sower; whereby the Danger of having Seed ſpoiled, before the Stitches can be hented up, is here intirely prevented. The Deſcription of this Plough, and its Uſes, I have ſhewn at Page 41, in the Month of *September*, and in others of my monthly Books; but not ſo fully but there is Room to give the following Account of ſowing Wheat for the Operation of this double Plough thus:

The Sowing Wheat-ſeed by this Inſtrument, as it ought to be done, lies very much upon the Driver's Skill and Care, who, to make the double Row of Horſes go true, muſt whip on the Neck near the Collar, that they draw as wide from one another

ther as can well be allowed, in order to give the Ploughman Room to look between, that he may make his Thoroughs lie even. Here the Sower may be ſaid to ſow all his Wheat-ſeed behind this Plough; that is, he ſows the plain Ground next to the Graſs-Baulk before the Plough enters, then returns with an empty Seed-cott, and begins after the Plough has entered, and ſows by the Guide of the firſt two Thoroughs. Then the Seedſman, while the Plough is finiſhing the firſt Stitch of Land, ſows the two firſt Thoroughs of the ſecond, and ſo on; and it is thus that the Seedſman ſows half the Ground before the Ploughman begins to make a new Stitch. Here four Horſes do not tread the Ground above half as much as they do when they draw a ſingle Plough in the ſame Work; which is a great Deal better for the Wheat; for in wettiſh Weather a conſiderable Part of the Wheat-ſeed is buried by their Tread, and then the Water is very apt to ſtand in the Hollow of their Footing, and chill and ſpoil the Wheat. In ſhort, this double Plough performs excellent Work in ſandy Loams, chalky Loams, dry intire Loams, and ſuch like Earths, in the Hands of a ſkilful Ploughman; then it will diſpatch double Work in a Day, make narrower Thoroughs than the ſingle Plough can, keep up its Work better, and ſecures the Wheat-ſeed as it is ſown againſt Weather and Fowls, to the Farmer's very great Advantage: But where an ignorant Farmer (as I have known it ſeveral Times done) pretends to manage this double Plough (that has a Crook in its Beam, according to the Cut of it I have fix'd in my *Chilturn* and Vale Farming-Book.) In Clays, or in other ſtiff, or in ſtony Grounds; or in ridge Vale-Lands; he will find himſelf miſtaken in his Hopes of Profit by it; and then Complaints are commonly raiſed againſt this valuable Plough, by ridiculing its Contrivance; when,

when, indeed, the Farmer's Ignorance is in the Fault, for not adapting its Uſe to a right Soil. This double Plough has been made uſe of by a Gentleman every Year for ſeveral Years paſt, who lives in the *Chilturn* or hilly Part of *Buckinghamſhire*, becauſe he finds his Account in its Operations; which it performs with ſuch Exactneſs, that he comes by the beſt of Crops of Wheat with the Help of this and other Sorts of Ploughs: Others, I ſay, that are firſt made uſe of in preparing the Ground for it, — in his incloſed Fields, whoſe Soils are gravelly or intire Loams, forty Acres of which were ſown, and finiſhed by this Plough, about the 22d Day of *October* 1742.

How Wheat-ſeed is ſown by the three-wheel Drill-Plough. — With this moſt excellent Pay-Rent Plough, now in uſe by common Farmers, Wheat is ſown from *Michaelmas* to *Allhollantide* out of its Hopper by a notch'd Drill-Box, that lets it gradually out in a Thorough or Drill made by the Share in a fine Earth, and afterwards managed to a very great Advantage; as I intend to ſhew in ſome of my future Works, how this Plough was invented to ſave the Charge of Men's Labour, and the Loſs of the fallow Year, by ſowing Corn, Turneps, Cole, *St. Foyne*, Lucern, and many other Seeds in Rows at proper Diſtances, for giving Room to Horſe-breaks, or Hand-houghs, to work between, and laying additional Nouriſhments to their Roots, killing Weeds and Inſects, and keeping the Ground always in a Tilth Condition.

How Chilturn *Farmers ſow their Turnep-Ground in this Month with Wheat-ſeed to the greateſt Advantage.* — There are two Sorts of Encouragements for Farmers to ſow as much Wheat-ſeed as they well can; one is, when Wheat ſells dear, or is likely to ſell ſo next Year, and which is commonly attended with the greater Proſpect in War-time; the

the other Reaſon is, on Account of the great Cheapneſs of Wheat; for then, as the Seed ſtands the Farmer in but little, he is prompted to ſow as much as he can, in Hopes of a riſing Market afterwards. For this Purpoſe, he eats ſome of his Turneps off in this Month with Sheep or Bullocks: If with Sheep, ſome of our beſt Huſbandmen in *Hertfordſhire* take theſe following Methods, *viz.* in an incloſed Field they employ a double Fold, that is, one of twice the common Bigneſs; and where the Earth is of the dry Sort, they keep them in it Night and Day for fatting them, and getting the Ground ready for ſowing it with Wheat, with all Expedition. But, in Caſe the Ground is wettiſh, then it is beſt to give the Sheep a large Piece of Turneps at a Time, by running a Row of Hurdles a-croſs the Field, that they may feed at their full Liberty, and fat the faſter. This Liberty, and frequent Shifting the Hurdles for giving them a freſh Bite, will make them feed the more greedily, and ſo keep them in Health: They ſhould have a Rack either of Hay or Pea-Straw ſtand conſtantly within their Reach, which at this Time of Year will be of great Service in preventing the Belly-ach, red or white Water, or Rot; Diſtempers often fatal to theſe Creatures. And that ſuch a Rack may be made to the greateſt Advantage, ſome have had a Cover over it, Half of which is to heave up by Hinges at Pleaſure, to put in the Straw, and keep it dry in rainy Seaſons. But, where Turneps are fed by Store-Sheep, it is common for Farmers to fold them in the uſual Manner, for Dreſſing the Land the better to nouriſh the next Wheat-Crop; and that ſuch a Wheat-Crop may be nouriſhed in the greater Perfection, it is generally practiſed to ſow ſuch Land Acre by Acre, that is, as ſoon as an Acre of Turneps is eaten off, to plow up the Ground, and ſow it with Wheat, either in Broad-lands, or two-bout Stitches,

Stitches, as the Earth lies wet or dry. But more of this preſently, for this Article I ſhall conclude with obſerving, that, in this Month 1742, I, as well as ſeveral others of our *Hertfordſhire* Farmers, plowed up Barley-Stubbles, and on one Plowing harrowed in Wheat-ſeed, becauſe our beſt Wheat ſold in this Month at *Hempſtead* Market for no more than three Shillings a Buſhel. Others did the ſame by their Pea-Stubbles and Turnep-Grounds, *&c.*

Wheat growing without Sowing. — At Page 32, in the Month of *September*, I have there wrote how Wheat ſowed itſelf and became a very good Crop, in a ten Acre Field near *Buſhy*-Common, by *Watford* in the Year 1739. But this is another Account how Wheat grew without ſowing into a Crop thus: A Field in our Parts of the Country, wherein grew a good Crop of Wheat in two-bout Stitches, was in this Month plowed again in two-bout Stitches, in order to kill Weeds, ſweeten the Ground by Winter-Froſts, and prepare it in this Manner for ſowing the ſame the following Spring with either Beans, Peaſe, Barley, or Oats. But, the Farmer finding that the ſhed Kernels of the laſt Crop of Wheat grew, he let it take its Chance, and had a tolerable Crop the next Harveſt, when Wheat ſold for ſix Shillings a Buſhel.

How a Farmer changed his Wheat-ſeed. — His Way was about *Michaelmas* Time to buy his Wheat-ſeed at Market ————————, which is reckoned then to ſell at the cheapeſt Rate. This gave the Farmer an Opportunity to enjoy a Change of Seed every Year, and keep his own Wheat longer againſt a riſing Market.

Several Caſes, ſhewing how Wheat-ſeed has been ſown after a Turnep-Crop in this Month to great Succeſs.— Where Crops of the *Dutch*, white, flat, or other early Turneps have been drawn and ſold, or

fed off by Sheep or Bullocks, you may then in this Month ſow the ſame Ground with Wheat-ſeed: Accordingly, many Farmers forecaſt and order their Matters for this very Purpoſe, as having by this Means an additional Crop to the Wheat-Crop. Where Turneps are pulled up, and carried off the Ground, there muſt the more Dreſſing or Manure be laid on, becauſe ſuch Drawing off a Turnep-Crop very much impoveriſhes the Earth: But, in Caſe the Turneps are eat off by Sheep conſtantly kept on them, then they will ſave a great Deal of ſuch Expence, for Sheep-Dreſſing in this Manner is reckoned at fifteen or twenty Shillings an Acre, if the Crop ſo fed be a full one; yet ſome Farmers are ſuch good Huſbands as to lay a Coat of Dung on beſides. In this Management, our common Way is to give ſuch Turnep-Ground only one thin Plowing, and harrow in Wheat-ſeed. Others will plow twice, and ſow Wheat in two-bout Stitches: But he is the beſt Workman that plows ſo, that the Wheat may have the greateſt Benefit of the Sheep's Dung; but of this more as follows.

Firſt Caſe. — A great Farmer near me having ſown a Field very late with Turnep-ſeed, there appeared in this Month only Leaves, and no Roots worth keeping longer; he therefore, after he had eaten them off with his Sheep, ſowed his Wheat-ſeed all over the ſame Ground broad-caſt, and plowed it in, leſt the Turneps ſhould grow again in the Spring-time, and ſpoil his Wheat. Therefore, to kill and ſmother the Turneps, he thus plowed his Wheat-ſeed in, inſtead of only harrowing it in, and it anſwered his Purpoſe; which made him ſay, he ſometimes was at a great Deal of Pains to get a Crop of Turneps, and now it coſt him Study and Labour to deſtroy them.

The

The Second Caſe. — A Farmer, who had ſown his fallow Ground twice with Turnep-ſeed, the laſt Time, it took, though late; but the Roots proved ſo ſmall in this Month, that he thought them not worth ſtanding, and therefore fed them off with his Sheep, and now ſowed Wheat-ſeed broad-caſt all over the Field, and then plowed it in with the double Plough as thin as poſſible, and never harrowed it afterwards; for this Plough in a right Soil is very proper for this Work, becauſe it makes moſt narrow Thoroughs in the thinneſt Manner poſſible, though both Shares are pecked.

The Third Caſe. — Another of this Man's Fields being in the ſame Condition, he plowed and ſtrained in his Wheat-ſeed, plowing it alſo thus Underthorough, that the remaining Turneps ſhould not grow again; which they are very apt to do, notwithſtanding the Top-Part is turned downwards by the Plough. Yet both theſe Ways were, in the Opinion of the next Farmer I am going to write of, wrong; and therefore his Management in the like Caſe was as follows: He firſt plowed his Turnep-Ground in Broad-lands, and harrowed it plain; then he plowed and ſowed his Wheat-ſeed in two-bout Stitches; for, by ſowing Wheat in this Manner, the Turneps are beſt prevented from growing again.

How Wheat-ſeed was ſet. — The late Lord *H*——— is ſaid to have made Uſe of a ſquare Frame of Wood, in which was fixed a certain Number of Teeth for ſetting Wheat-Kernels in Rows at ſix or eight Inches aſunder in a light Soil, for the Conveniency of houghing between the Rows with very narrow Houghs in the following Spring-time. Thus they did about *Acton* in their ſtiff Grounds and three-bout Lands, where, in the great Froſt 1740, their Wheat was greatly cut off; which to ſupply, they fixed iron wired Teeth in a

long Stick, with which, at once, they made ſeveral Holes, and put Wheat-Corns therein; and it ſo well furniſhed the deficient or vacant Places, as to become in the Whole a good Crop at Harveſt.

The Damage of ſowing Wheat-ſeed too late. — Be ſure not to ſow your Tilth-Ground with Wheat-ſeed later than in this Month till *February*; for ſome Farmers, who were ignorant of the fatal Effects attending ſuch late Management, have loſt their Crops of Wheat by it; becauſe, when Wheat has been ſown in next Month, ſuch violent Froſts have ſucceeded as to kill the Wheat upon the Chip, as I have obſerved before; therefore, it is far better (where there is a Neceſſity to ſow Wheat-ſeed) to defer it till *February*, as I intend to ſhew preſently in a more ample Manner.

How Wheat-ſeed may be ſown naked, without any Preparation, to Advantage.— One of the moſt celebrated Ploughmen in *Hertfordſhire*, who was then Servant to a Nobleman, ſaid that, if it was a very dry Sowing-time, he found it the beſt Way to ſow his Wheat-ſeed dry and naked, without brining, liming, or doing any Thing to it; for that, if the Drought continued, it would lie ſafe in the Ground: Whereas, if ſuch Wheat-ſeed was firſt brined, or otherwiſe liquored, for ſome Hours together, and ſown, it would ſprout and quickly die for Want of ſufficient Moiſture to carry it forward. — Upon this Article I could write a very material Account; an Account that has eſcaped the Pen of all Authors whatſoever to this Day, notwithſtanding their great Learning, and my Illiterature, which, I frankly confeſs, ſubjects me to the Commiſſion of ſome Incoherencies and Blunders in my Writings. But I truſt the Relation of Facts, *&c.* (which certainly is the ſureſt Way to further Improvements in Husbandry) will be ſo acceptable to my Readers, as to plead my Excuſe for the many Deficiencies I have,

and

and may be chargeable with; which, as bad as they are, may very likely help hereafter, as Part of a Foundation for a better Pen when I am no more, to entertain the World with polite and more ſerviceable Treatiſes on this moſt noble, moſt profitable, and moſt pleaſant Science of Agriculture. But I muſt haſten to a Concluſion of this Chapter on *Wheat*.

How a Farmer got a good Crop of Wheat by ſowing Wheat-ſeed, that had before ſprouted or ſpired. — Where Wheat-ſeed has ſprouted but a little, its Growth is hazardous; yet I am going to ſhew how ſuch Seed ſucceeded to the Produce of a plentiful Crop. A certain Farmer, who lives about a Mile diſtant from me, bigotted to his own Opinion, ſoaked his Wheat-ſeed in only fair Water a Night and a Day; and, being hindered from ſowing it, did not lime it, but ſpread it thinly on a Floor. Now it happened, that his Wheat-ſeed ſprouted at three Days End, ſo that the Farmer's Son adviſed him to give it the Hogs; but, notwithſtanding the Son's Advice, his Father ſowed it, and at Harveſt had a good Crop in Return; which leads me to obſerve, that his ſoaking the Seed, in fair Water, was to cauſe the underline Corns, and ſmutty and Pepper-Wheat Kernels, to ſwim at Top, as well as the Seeds of Weeds for their being taken off; and as this Seed was not mow-burned, and only juſt ſpired, it grew well in a moiſt Seaſon; but, had he limed the Kernels as ſoon as liquored, it is ſuppoſed the Heat of the Lime muſt have forced the Seed to ſpire with the greater Vigour, contrary to another better Way of ſalting and liming, which gives ſuch a thick plaiſtered hard Coat to Wheat-Kernels, as rather prevents than forwards the ſprouting Part of ſoaked Seed. But that ſuch ſoaked Wheat may grow into a good Crop, though firſt ſprouted, is not to be wondered at, if it be conſidered, that Sprouting of

Seeds

Seeds is done on Purpoſe by ſeveral Gardeners, for cauſing them to grow quick, and take the Ground the ſurer; a Method frequently practiſed upon Carrot-ſeed, in order to avoid the Waiting and Hazard of its tedious Growth.

How a Farmer is ſo troubled with Darnel, that he thinks it grows naturally without ſowing, to the great Damage of his Wheat-Crop. —A Farmer, who rents a ſandy, a gravelly, and a ſtony Clay Ground near great *Barkhamſtead* in *Hertfordſhire*, is ſo troubled with that hurtful weedy Seed called *Darnel*, that he thinks it grows naturally; for, though he ſows clear Wheat-ſeed, and that on a Graſs-Lay, yet he has Darnel among his Crop. This obliges him to ſoak his Wheat-ſeed in Liquor to ſkim off all he can; and ſome of the lighter Darnel-Corns will ſwim, but the biggeſt are too heavy to riſe. This happens when he ſows his own Seed; and if he buys clear Seed, and ſows it, he has ſtill Darnel, which makes him deſpair of ever clearing his Ground of this horrid Seed, which the Wheat-Buyers abhor; becauſe it gives the Flour a dark Caſt, to the Leſſening of its Value. How careful then ought every Farmer to be in ſowing always clear Seed, for, if they are remiſs in this important Article, they may chance to give ſuch Darnel-ſeed a Fee-ſimple Title, and make it an Inheritor of their Landlord's Eſtate for ever.

To ſow Wheat after Carraway-ſeeds. — About *Colcheſter*, *Ipſwich*, and other Parts of *Eſſex* and *Suffolk*, they ſow Carraway, Coriander, and Teaſel-Seeds. When they ſow Carraway-ſeed on new broke up Ground, they plow the Turf in very thin, with a two-wheel Plough that has a Fin on its Share. Then immediately follows a Foot-Plough, with which they turn up a mouldy Covering on that. In ſhort, they ſow and harrow in Carraway-ſeeds in the Spring-time. Now after two, three, or four Years, that they have got ſeveral

veral Crops of theſe Seeds off, they plow up this Ground, that by this Time has acquired a rich Bottom, by the Rotting of the firſt Turf, which now proves ſo freſh and hearty, that it will throw up a great Wheat-Crop, if on one Plowing Wheat-Seed is harrowed in, in *October*, or at the Beginning of this Month.

To ſow an Oat-Stubble with Wheat.— In ſome of the furthermoſt Parts of *Eſſex*, they ſow white Oats on their fallow Ground, for which Purpoſe they dung their Land extraordinary well. Then as ſoon as their Oats are mowed and carried off, they plow ſuch Oat Stubble twice in Broad-lands, and then plow and ſow their Wheat-Seed in two-bout Stitches, alledging it is better Dunging for Oats than Wheat, becauſe as they have here little other Sort of Dreſſing beſides Dung, they ſhould be over-run with Weeds, if they dunged and ſowed Wheat-Seed on their fallow Land; and yet, for all this their Care, they are in ſome of theſe Parts over-run with that incurable pernicious Weed, *Bodle*, or as ſome call it, *Gould*, being nearly like a Marygold, and may, for aught I know, be a wild Sort of it, for it increaſes and runs ſomething like it,

Sowing Wheat in ſome Parts of Warwickſhire.— This Country affords ſeveral Sorts of Soils. In ſome Parts of it, there is a light Earth, that they ſow their Wheat in, and manage after this Manner: As ſoon as they have plowed their Ridge Land, they ſow their Wheat-Seed on the rough Ground as the Plough left it, and then immediately drive four or five Horſes a Breaſt over the ſame to tread it in. When this is done, they directly draw the Harrows over all the Ridge Land, which finiſhes it.

Why Wheat does not ſucceed ſo well that is ſown after Allhollantide, *as before.*— Although I have wrote in this Month of ſowing Wheat in ſeveral Shapes and Soils, becauſe it is done by many; yet ſuch late

late Sowing is ſo far from deſerving Commendation, that it rather deſerves Diſpraiſe: For, in former Times, there was hardly ſuch a Thing practiſed as ſowing Wheat after *Allhollantide*; but now there are Thouſands of Acres ſown even till the Beginning of *March*. This brings to my Memory what I have heard concerning the Seed-Cake; which in ancient Days was baked on Purpoſe before-hand to be given to the Ploughman, and others of the Farmer's Servants, provided they had done plowing and ſowing Wheat before *Allhollanday*; and good Reaſon they had for it; for Wheat ſown in *September*, will ſometimes branch into four or ſix Blades or Stalks, when that, ſown in this and other Winter Months, will not only be in Danger of ſpoiling in its firſt Sprouting by the Froſts, but come up with only one or two Blades or Stalks; and, if ſuch latter ſown Wheat happen to grow into the Proſpect of a good Crop, yet ſuch Wheat generally deceives the Buyer of it, becauſe it will not weigh ſo much as the former ſown.

CHAP. II.

Of Plowings *preparatory for ſowing* Lent *Crops of Grain*, &c. *in* Chilturn *Grounds.*

PLOWING *a ſtiff* Chilturn *Soil, for ſowing Peaſe in the ſame next Spring.*— In this Month a Farmer was plowing two-bout Wheat-Lands into two-bout Lands again preparatory for ſowing them with Peaſe in *February* or *March* next, becauſe the laſt *Lent* Grain that grew here was Oats; for it is a received Maxim in our Parts of *Hertfordſhire*, that if a Farmer ſows the ſame Ground with the ſame

Lent

Lent Grain twice in ſix Years, he will have a poor Return. This was a ſtiff loamy Earth. Some of the worſt Farmers give a Stubble only one Plowing at Sowing-Time, and plow or harrow in Peaſe. But this is coarſe Work.

Another Way of plowing for ſowing Peaſe in February, *or* March.———In a gravelly Soil, where Wheat had grown in two Bout-lands, in this Month a Farmer bouted up the ſame; that is, he plowed them into ſingle Bouts, and laid them up very ſharp for the Froſts to penetrate through them, and to lie ſo till *March*; and then he will either harrow the Bout a little levelling, and then plow and ſow his Peaſe in two Bout-lands; or elſe he will go one Thorough on a Bout, juſt for laying the Bouts level, and then harrow them a-croſs. Next he will ſow and plow his Peaſe in Broad-lands, and harrow the Ground, as ſoon as he has done, to let them ſprout eaſily out.

How to plow and prepare two-bout Wheat-ſtitches for ſowing Oats and Clover in the Spring Seaſon.—In this Month a *Chilturn* Farmer back-bouted his Wheat-ſtitches that were compoſed of a gravelly Loam, in order to get this Earth fine and ſweet for ſowing therein Oats and Clover, for which Purpoſe he let the Land lie in this Poſture till the latter End of *February*; when he harrowed it croſs-ways, and then with the Two-wheel Fallow-Plough, that he uſed before, he drew out his Thoroughs at nine Steps Diſtance, and plowed the Ground croſs the laſt Plowing, and harrowed in his Oats and Clover-ſeed. Now obſerve, that this is a ſhorter Way than Bouting up the Ground, for then there would require another Plowing to thorough it down, before it can be harrowed. However, this is certain, that all ſuch Land as this, that is to be ſown with Clover, or other artificial Graſs-ſeeds, in the Spring among Oats, neceſſarily calls

for a ſweet fine Tilth; and that is not to be had without two or more Plowings.

Another Way.——Now plow down your Wheat-ſtitches, by running the Two-wheel Fallow-Plough three or four times through each Stitch, which will almoſt level the Ground; and which is to lie in this Poſture till *February* or *March* next, when it is to be harrowed plain, plowed a-croſs, and Oats harrowed into the ſame. But this ſhould be practiſed only in ſtiff Soils.

A third Way of preparing Ground for ſowing it with Oats and Graſs-ſeeds in the Spring Seaſon.——About *Cheney* in *Buckinghamſhire*, that lies about three and twenty Miles diſtant from *London*, they ſow great Quantities of artificial Graſs-ſeeds, and generally ſucceed to their Deſire; ſaving, thoſe *Chilturn* Farmers are wrong in their Management, who ſow Clover and other Graſs-ſeeds on only one Plowing up of the Ground for Oats, as too many ignorantly and obſtinately commonly do, and ſuffer. Therefore, as ſoon as you have got all your Wheat in, either in *September*, *October*, or in this Month at furtheſt, lay up your Wheat-ſtitches, or two Bout-lands, in ſharp ſingle Bouts, and let them lie in this Mode till, in *January* next, you thorough the Bouts down, that are to lie ſo till *March*, when the Land is to be plowed a-croſs, and Oats and Graſs-ſeeds harrowed into the ſame. Theſe Directions, for thus managing two Bout-lands, are confined to a ſtiff Soil; for, in Sands, Chalks, and ſuchlike, the Ground is too light to lie in this Form of Plowing, and too ſoon to be plowed in any Manner or Way for this Purpoſe; becauſe ſuch early Plowing up of ſuch Soils would expoſe them not only to loſe a great deal of their Spirit or Heart, but likewiſe make them liable to have ſome Quantities of their beſt Earth waſhed away, to their great Impoveriſhment, as I ſhall further enlarge

enlarge on in *February*, or *March*, when I am to write on Sowing Oats: And where I intend to give an Account how a Farmer may ſow Oats 'till he has hardly any in Return; and there, not only how to prevent this great Misfortune, but alſo how a Farmer may come by the beſt of Crops off them, though he does no more than is uſual to the Land they are ſown in; for, as common as this Grain is, it certainly deſerves our great Regard in obtaining good Crops of it, and that in the higheſt Perfection, becauſe it is a *Lent* Corn, that will grow not only in almoſt all Sorts of poor *European* Soils, but is fit for a hundred neceſſary Uſes.

A fourth Way, ſhewing the Benefits of plowing Ground in this Month, preparatory for ſowing Oats in it at the Spring. — In the ſtiff *Chilturn* Soils about *Chaffon* in *Bucks*, they plow their two Bout-lands that were Wheat laſt time, thus: With the Wood-Chip Wheel-plough, the Beginning of this Month, they go one Bout on a four Thorough-ſtitch, or two Bout-land, by which means they make a Ridge where the laſt Thorough was, and leave the old Ridge almoſt whole. Next Time, about a Fortnight or three Weeks before the laſt Plowing is to be done, the Ground is to be harrowed overthwart, which pulls down the old Ridge, and prepares it for the laſt Plowing. When they plow the Land a-croſs into Broad-lands, after it is harrowed once in a Place, they ſow their Oats, that they may not come in Rows, which they would do, if they were ſown on the rough Ground, as the Plough left it: Theſe they harrow in twice in a Place, and then ſow their Clover and Ray-graſs, or Clover, Ray-graſs, and Trey-foil, altogether, and harrow them in, once in a Place. Thus they harrow their Ground here three times in, all in a Place, at Sowing, and plow twice in all. But, for the moſt Part, they ſow only

Clover among their Oats, and no more of this, than what will ſubſiſt their Suckling Ewes for bringing up Houſe-Lambs, between the Beginning of *March* and *May*-Day, when they fallow up the ſame Land for preparing it to receive Wheat-ſeed in *October*. Now this Management is done with a great deal of Diſcretion, becauſe, by ſowing Clover among Oats, the Ground is undreſſed, and ſo poor, as not to bring forward and maintain a large Crop of artificial Graſs; and therefore they let it lie but ſix or eight Weeks at moſt, before they plow it up; but, when they deſign a Clover Crop ſhould ſtand a Year or two, they commonly ſow it among Barley, for that then the Ground is in good Heart for maintaining ſuch a Graſs Crop, with or without any after auxiliary Helps of Dreſſing. This laſt Operation was performed in a loamy gravelly Soil.

A fifth Way, ſhewing the Benefits of plowing Ground in this Month, preparatory for ſowing it with Oats and Clover in the Spring Seaſon. — Many Farmers, in our *Chilturn* incloſed Country, contrive to ſow Clover among Oats, on Purpoſe to employ and improve the ſame Ground the next fallow Seaſon, which otherwiſe would lie idle. By this they enjoy their Land every Year, and yet improve it, without breaking through the common Covenant in Leaſes, that the Tenant ſhan't croſs-crop; for, though the Clover may be called a *Crop*, it may be alſo called a *Dreſſing* of the Ground, becauſe a good Crop of Clover ſo enriches it either fed or mowed, that, in ſome Countries where I have travelled, it is under the Appellation of the *Mother of Corn*; and, that Clover, or Ray-graſs, or Trey-foil, or altogether, may take ſurely, our Farmers give their Wheat-ſtitches two or three Plowings. The firſt in laſt, or at the Beginning of this Month, in a Shape of Plowing adequate to the Nature

Nature of the Soil; which is an excellent Piece of Forecaſt, or Huſbandry, if practiſed in ſtiffiſh Loams, as well to kill the Twitch, or Couch-graſs, as the Honeyſuckle, and other Weeds, and reduce the Earth into a fine Tilth for ſowing and cauſing artificial Graſs-ſeeds to take the Ground, and flouriſh afterwards. And let me tell you, where ſuch Land is well planted with Clover-graſs, and the Clover ſuffered to ſtand for a mowing Crop till the latter End of *May*, and, if it proves a full Crop, there may be expected as much Profit from it, as from a Crop of Wheat. A Proof of this, by many, was experienced in the Year 1742, which though the Summer was ſuch a dry one, as returned us at *Gaddeſden*, and a thouſand other Places, not half a full Crop of natural Graſs, yet the Clover *rallied*, (as we call it) and, by Vertue of a good Shower of Rain or two, it got a covered Head, enough to ſhade its Roots, and grew into ſuch fine Crops, as paid many as well, or better than Wheat-Crops. An Example of this I ſhall here ſtate as follows, *viz.*

	l.	*s.*	*d.*
A three Acre and a half incloſed Field, at *Gaddeſden*, yielded, at the firſt Mowing, ſeven Loads of Clover-Hay, ſold for 30 *s.* a Load out of the Field	10	10	0
A ſecond Mowing returned four Loads at the ſame Price —— —	06	00	0
The After-Meath Graſs, which was fed by Cattle, was worth 10 *s. per* Acre	01	15	0
Total Profit in the Summer, 1742 ——	18	05	0

A ſixth Way to plow Land to ſow Oats in the Spring.——What I am going here to write is very particular, and not cuſtomarily done. A Farmer ſowed his Clover-ſeed among Wheat that grew in two Bout-lands, and after the Clover had been fed one Year

Year (for here they could not mow it) on the ſecond Day of this Month, he plowed the Boutlands into Broad-lands, with five Horſes, at three times drawing the Wheel Fallow-plough thorough each Land; and in this Poſture it lay till *February*, when he harrowed in his Oats.

The Method of plowing Thoroughs, preparatory for the ſowing Oats, and other Lent *Grain.*—The Beginning of this Month plow the Thoroughs of your Broad-land Barley-ſtubbles, for preparing the Ground againſt the next Plowing, in order to get it into a fine Tilth for ſowing Oats or Peaſe in *February* or *March* next. What we call *plowing up Thoroughs*, is laying them open to ſweeten and ſhatter by the Froſts. Some, by the Wheel-plough, do this Work at one Bout, others at two Bouts: The laſt Way is beſt, and is beſt performed by the Two-wheel Pea-ſeed-plough. In this Poſture the Land lies all the Winter, and, when the ſame Ground is plowed up in *February*, or *March*, for ſowing or harrowing in Oats or Peaſe, then, with the Two-wheel Fallow-plough, we turn the ſame Earth into the old Thoroughs again at twice, which with the narrow Pea-plough were laid up at four times: Thus there will be a new Henting, or Thorough in the Middle of each old Broad-land. The Benefit of opening Thoroughs, in this manner, is likewiſe to prevent any whole Ground being left unplowed; which if neglected (as ſome idle Huſbandmen do) then there will be ſome whole Ground remaining unbroke by the Plough, that conſequently, by its Hardneſs and Sowerneſs, will breed and throw out Briars, or Honeyſuckle or other dangerous Weeds, to the choaking and damaging the Grain. But theſe Operations are neceſſary where Land is to be plowed only once for Oats or Peaſe. Where the Turnriſe, or Turnwriſt-plough is uſed, there is no Occaſion to open Thoroughs,

roughs, for here there are none to open: Nor in Vale-ridge Lands, *&c.*

How one of our beſt Farmers got great Crops of Oats. —His incloſed Fields were moſt of them furniſhed with Honeyſuckle, which is a Weed the Farmer does all he can to prevent growing among his Grain, which it would ſurely do, if his Wheat or Barley-ſtubble had not two Plowings given them for Sowing in the ſame Ground Oats; and therefore he begins in laſt, or in this Month, early to plow his Wheat-ſtitches in ſingle Bouts, and lets it lie ſo till mid *February*, and then thoroughs down every Bout, harrows it plain, plows it overthwart into Broad-lands, and harrows in Oats the latter End of that Month, or in *March*; for where the Honeyſuckle Weed is thick planted, as it is in many Fields about us, it would come up and overcome a great Part of the Crop of Oats or Peaſe, if they were ſown only on one Plowing of the Ground. As they ſeldom ſow Oats in *Middleſex*, or in Vales, I ſhall paſs over writing on their Management here; and only add, that, perhaps, ſome of my Readers will be ſurpriſed to find I write againſt the Honeyſuckle, that I have, in other Parts of my Works, recommended the Increaſe of. But, to clear this ſeeming Contradiction, I am going to ſhew the Difference between the Honeyſuckle as a Weed, and the Honeyſuckle as a Graſs.

The Difference between Honeyſuckle as a Weed, and Honeyſuckle as a Graſs.——Honeyſuckle is certainly allowed to be one of the beſt Graſſes growing in our Upland Meadows; and is ſo much approved of, when a good Quantity of its Hay is ſeen in Truſſes, ſold at a *London* Market, that nothing tempts the Buyer more. In the Country alſo, it is in great Reputation, as being a moſt ſweet, hard, ſhort Hay, that produces abundance of Cream on Milk, as well as its Graſs; fats Beaſt to Admiration,

tion, and preſerves Cows, Sheep, Deer, and Conies from rotting in dangerous wet Seaſons. In ſhort, the Honeyſuckle, either in Graſs or Hay, deſerves to be ranked among the beſt of Graſſes and Hays: As the Lady Finger-graſs, the wild Thetch, or Twine-graſs, the Treyfoil, and Cinquefoil Sorts, *&c.* Yet I ſhall prove, that this Honeyſuckle-Graſs is pernicious on another Account: And that is, when Honeyſuckle grows naturally wild, as it does more or leſs in moſt of our *Chilturn* incloſed arable Fields, it then oftentimes proves a conſiderable Damage to the Farmer, by drawing out ſo much Nouriſhment from the Ground, as to impoveriſh it, and leſſen the Growth of the Crop of Corn, which it comes up amongſt. But it may move the Wonder of my Readers, how the Honeyſuckle got ſo much Poſſeſſion of the Ground, as to be never out of it. To this I anſwer: That Honeyſuckle may be brought to grow in Ground two Ways; one, by ſowing over it Coal-aſhes, Soot, and ſuch like Manures, which is well known, in our Parts, to produce the Honeyſuckle-graſs or Weed, and this either in meadow or plowed Grounds. The other Way is done by ſowing the Seed of Honeyſuckle, on purpoſe to obtain a Crop of it for feeding Cattle, and mowing it for Hay as Clover is done; and which is very often done, to very great Succeſs in plowed Land, where it ought to remain no more than one or two Years at moſt; and even then the ſame Ground ſhould have the beſt of Plowings to deſtroy it: And therefore the weak-teamed Farmers are more liable to let ſuch temporary Honeyſuckle get a-head, and remain a Maſter-weed; for ſo it often does, notwithſtanding the ſeveral Plowings that are in one Year given to the ſame Earth for ſowing Corn in the ſame by the two and three Horſe weak Farmer. Indeed, when the Ground is under a Wheat Crop, it is not much

much minded, becauſe the ſeveral Plowings that are made preparatory for fining the Ground to fertiliſe the Wheat-crop, and to kill and check the Growth of Weeds, prevent the Growth of the wild Honeyſuckle among the Wheat-crop. But, as many Farmers give the Earth but only one Plowing for Oats, Peaſe, or Beans, the Honeyſuckle then grows predominant, and rallies to the great Damage oftentimes of ſuch a *Lent* Crop: And this moſt of all in wet Years, in gravelly, loamy, and clayey Soils; for Chalks and Sands are not troubled with it. Thus, in many of the incloſed Fields of *Hertfordſhire*, the Honeyſuckle grows ſo thick, as if the Seed was ſown on Purpoſe; and by this Means is ſometimes mown for Hay, and for Seed.

How to plow up Ground in this Month, preparatory for ſowing it with blue Peaſe.—— Plowing, to ſweeten and clean Ground againſt next Spring for ſowing it then with blue Peaſe, is to be done more than one Way. Our Farmers obſerve to manage their ſtiff Loams thus: In this Month, with their Two-wheel Fallow-plough, they plow their Wheat two Bout-lands deep into two Bout-lands again; which moves much of the Ground out of its former Situation, and lays it very high from the Power of Waters, and thus expoſes it one of the beſt Manners for the Air and Snow, to ſweeten againſt *March* or *April:* Then at the Beginning of *March*, it may be thoroughed down, harrowed, plowed, and ſowed, in what Shape you think fit with blue Peaſe, either in *March*, or *April*; but the latter is generally made choice of in *Hertfordſhire*, becauſe here it is commonly too cold to venture the Seed of this tender blue Pea in any of our wet Loams till *April*. There are other Ways to plow Ground, as I ſaid, for Sowing blue Peaſe, as when the Wheat-ſtitch is plowed into a Stitch again in this

Month, as I have been writing; and alſo in *April* to ſow the blue Peaſe in a two Bout-land or Stitch, which certainly is a good Way in wet ſtiff Soils. Others will plow ſuch Wheat-ſtitches into ſingle Bouts in this Month, and let them lie till next Spring, for the ſame Purpoſe.

How a Field had three ſeveral Sorts of Plowings performed in it, for Sowing it with Hog-peaſe in the Spring. —— This Field contained ten Acres, and was compoſed of three ſeveral Sorts of Earth; that is to ſay, a gravelly Loam, a clayey Loam, and an intire Loam. The gravelly Part, that had been before ſown with Wheat in Broad-lands, the Farmer in this Month plowed it into Broad-lands again, to lie, and get ſweet and fine, in order to ſow it with Peaſe in the Spring: The clayey Loam, that laſt Time had been ſown with Wheat in two Bout-lands, he plowed alſo in this Month into two Bout-lands again, to ſow it with Peaſe in the Spring-Time; and the other Part that was an intire Loam, and had been before ſown with Wheat, as the laſt was in two Bout-lands, he plowed them into ſingle Bouts, to lie ſo all the Winter, till the Spring, for Sowing it with Hog-peaſe, as I hope then to give an Account in what Manner it is to be done; ſo that here were three different Forms of Plowing performed, previous to the Sowing of this Field with Peaſe in the following Spring-Time; which ſhews how neceſſary it is for Farmers or others to know their Buſineſs, for Sowing a proper Grain in a Soil, artfully made agreeable to it; but, where ſuch Knowledge is wanting, then Inſtructions are perfectly neceſſary, and to go for them to a Neighbour puts a Perſon under a great Riſque of being impoſed on; as I am going to ſhew,

How Gentlemen may be impoſed on, that truſt to Neighbours Judgments and Information for carrying

on

on the Farming Buſineſs. —— This Article deſerves almoſt a ſeparate Treatiſe, for fully declaring the ſeveral Caſes of thoſe who have ſuffered by leaning on the Judgment of others, for carrying on the Buſineſs of Farming: And yet it muſt be owned, that ſuch Men are in ſome Manner obliged to conſult others, and be beholden to them for their Counſel in Queſtions they can't get a Solution to any other Way. However, it is great Odds, as the World now goes, if a Gentleman is not impoſed on in the main, who is obliged to conſult neighbouring Farmers on this Account; for the Farmer is naturally an Enemy to the Gentleman's holding a Farm in his own Hands, becauſe, if they were encouraged in this, ſay they, How ſhall we come by Farms to occupy? And, therefore, it is my humble Opinion, where one Farmer-Adviſer proves true, there are three or four, I believe I may ſix or more, that act falſe in this Reſpect. But to prevent (as I have heard the Expreſſion made uſe of) this, ſays the Gentleman, I will treat them into Honeſty, and oblige them to be my Friends this Way. No; this won't rightly do ſtill: For, as I ſaid, a Gentleman's Undertaking Farming naturally breeds Jealouſy and Envy in his neighbouring Farmers, and therefore it ought not to be expected that they will always prove true in their Informations; and this, becauſe even their Brother-Farmers will then be ſet againſt them; and eſpecially if they don't enjoy the ſame Munificence as they do. At this Rate, a Gentleman may ſpend more than the Income of ſuch a Farm, in Treating them for their Counſel. Again; if a Perſon, who is ignorant in the Science of Agriculture, ſhould meet with a Knave for his Aſſiſtant, I ſay, if he is Maſter but of a narrow Fortune, he may ſoon run it out before he knows where he is, for I have known ſuch an evil Counſellor do it deſignedly;

and, after he had obtained his Ends, he bragged of his ſubtle Wickedneſs to the Approbation of others. On the contrary, where a Gentleman has a Deſign to take a Farm into his Hands for his Profit, Health, or Pleaſure, or for all theſe Reaſons: Then, I ſay, ſuch a Perſon may carry on this Buſineſs with Safety, by hiring a right, honeſt, well-qualified Ploughman, and others, whom he may conſult from Time to Time; for none, tho' ever ſo great, ought to refuſe a Parley with his Servants, who engage themſelves in ſuch Huſbandry Affairs. And thus, with the Help of theſe my Monthly Books, they may prevent their being impoſed on by the Advice of ill Neighbours, and ſo avoid that Rock, againſt which many have ſhipwrecked their Fortunes; becauſe, by my ſeveral Years Travels on Purpoſe, and holding my own Farm, and the Glebe-Lands of the Pariſh that I rent in my own Hands, the former for near thirty Years together, I am enabled to write ſuch Caſes and Informations as may be ſerviceable to all thoſe who undertake the Farming Buſineſs both in *Chilturn* and Vale Countries, ſo as to prevent their Suffering in a great Meaſure by the deceitful Advice of thoſe that know the Management of Affairs better than they do.

How a Farmer plowed up a Clover-Lay for ſowing Peaſe at Spring.—— This Farmer having a Lay of Clover, he plowed it in this Month into Broad-lands, and let it lie ſo till the Beginning of *March*, when he harrowed it, and ſowed Half his Hog-peaſe under Thorough, and harrowed the other Half in with great Succeſs.

How another plowed a Barley-ſtubble for Peaſe. —— Now plow your Barley-ſtubbles, that are of the ſtiff ſort of Land, into Bouts, I mean ſingle Bouts; and let it lie in this Poſture till *March*, when they are to be harrowed croſs-wiſe, and ſow

your

your Peaſe then Half under Thorough, and Half at Top, and harrow well. This has been done with Succeſs.

To ſow Chilturn *incloſed Lands with Beans.*—— Land, fit for Wheat, is commonly fit for Horſe-beans, and here they are often ſown on Purpoſe for a Change of Seed to the Ground, as well as for Profit otherwiſe. In this Caſe we *Chilturn* Farmers, in *Hertfordſhire*, generally ſow theſe Beans in *February* in two Bout-lands, thus: The Wheat Stitches, that now lie in two Bout-lands, are in this Month to be plowed into two Bout-lands again, and to remain in this Poſture, as I ſaid, till *February*, when Bean-ſeed is to be ſown in theſe two Bout-lands, which afterwards, or at the ſame Time it is ſown, is to be harrowed down; but the beſt Way is thus to plow and prepare the Ground, and, in the Spring, to ſow Beans with the Drill-plough, and afterwards to employ the profitable Horſe-break.

How to plow Ground in this Month, preparatory to ſowing it with Barley-ſeed, the following Spring. ——In this Month plow your Broad-land Wheat-ſtubble, that is between a ſtiff and a ſhort Earth, into Broad-lands again, croſs the laſt Way they were plowed, and let them lie ſo till *Candlemas*; then they are to be bouted up croſs-wiſe, and to remain ſo till the Beginning of *March*, when the ſingle Bouts are to be harrowed a-croſs, twice in a Place; and laſtly, they are to be plowed croſs-wiſe into Broad-lands for harrowing in Barley-ſeed. This will be a Hitch-crop, but remember that ſuch Management calls for Plenty of Manure.

A ſecond Way. — Plow your Broad-land Wheat-ſtubble into ſingle Bouts in this Month, and let it lie till the latter End of *January*; then, without any Harrowing, thorough the Bouts down, and let them remain ſo till the Beginning of *March*, when it is

to

to be be plowed a-croſs into Broad-lands for ſowing your Barley, and is an excellent Way to deſtroy all Sour, Twitch, or Couch-graſs, and other Weeds, if the Winter prove frofty; as alſo, for ſweetening and fining the Earth for increaſing Crops of Barley and Graſs-ſeeds that may be ſown among it.

A third Way. —— Others have plowed their Wheat-ſtubbles up in *September* thus: They firſt filled their Thoroughs in, and, as ſoon as this was done, they plowed the Ground into Broad-lands, and let it lie ſo till this Month; when they have laid long Dung over all the Field, and plowed it in ſingle Bouts, in order to hollow and ſweeten the Ground; for, by the Spring, the Froſt will very likely rot and mix it with the Earth to a great Advantage. But laying Horſe-litter, or long Dung, on, now, is not very commonly practiſed in this Month. The general Way is to lay ſuch Dung in a Clamp, and get it rotted in that Poſture againſt the Spring, for plowing it in juſt before the Barley is ſown.

A fourth Way. —— A Gentleman having a Clover-field, which had laid ſown under this artificial Graſs two Years, when the Clover was all eaten off: At the Beginning of laſt Month, he plowed it into Broad-lands, for it was a gravelly loamy Soil. In *December*, he harrowed all plain, after which he preſently dunged it all over. Then, the Beginning of *January*, it was plowed into ſingle Bouts a-croſs the laſt Plowing, which after they were harrowed down in *March*, the Field was plowed and ſown with Barley; for, in our *Chilturn* Country, we ſeldom ever make a Tilth for Barley, as they are forced to do in Vales, and in other heavy, low, wet Grounds.

CHAP.

CHAP. III.

To plow for Barley *and* Oats, *about* Chaffon, *in* Bucks.

HOW *Farmers about* Chaffon, *in* Bucks, *manage their Grounds for getting good Crops of Barley and Graſs on it, the following Year.* — Here their Soil is a gravelly Loam, for the moſt Part, that lies incloſed, at about twenty-three Miles Diſtance from *London*, which encourages moſt of theſe Farmers to ſuckle Houſe-Lambs; and the more, becauſe the carrying of their own and Neighbours, to make up a profitable Load of them to *Smithfield*, gives them an Opportunity by the ſame Return to bring down Soot, or Horn-Shavings, or Trotters, or Hair, or Glovers-Shavings, or Hooves, or Sprats, or Rabbit Dung, made by thoſe who keep the ſame Sort in Hutches, which many do in *London*, and the adjacent Parts, to conſiderable Profit. I ſay, theſe Farmers, by thoſe Means, ſow a great deal of artificial Graſſes for their Suckling Ewes, and for the moſt Part they ſow it among Barley; and, for this Purpoſe, their Way is commonly to ſow their Barley upon their Wheat Stubble thus: As their Wheat is here ſown in Four-bout Lands, at *Allhollantide*, they plow four of theſe Four-bout Lands into one Broad-land with the Wood-chip Plough. Then, at *Chriſtmas*-time, they harrow all the Ground plain, and make their firſt Stirree, by plowing the Earth into Broad-lands again, which they let lie in this Poſture till mid *March*, when they harrow all even, and directly ſow Half their Barley-ſeed, and plow it under Thorough croſs the laſt Plowing Broad-land Faſhion. Next, they ſow the other Half of the Barley-ſeed on the rough Ground as the Plough left it,

and

and harrow it in twice in a Place. But their cuſtomary Way is, to ſow a Peck of Ray-graſs, and ten Pounds Weight of Clover-ſeed Broad-caſt on each Acre, juſt before the laſt Harrowing is to be performed, which they harrow in but once in a Place, and the Work of plowing and ſowing is done. Now as Farming in theſe Parts differs in a very particular Manner from all or moſt other Places in *England*, I ſhall take the Liberty of remarking on that Part of their Management which relates to their getting Crops of artificial Graſſes, as being a chief Article in making up their Year's Rent; for, without this Piece of Huſbandry, their Landlords could not let their Ground at the Rate they do, nor the Farmers maintain their Families as they now live. But to proceed:

Remarks on the Chaffon *Husbandry.* — As theſe Farmers here ſuckle great Numbers of Houſe-Lambs for *London* Market, the ingenious Mr. *Tull's* Drill-ploughs, nor no other Sort of them, are of Service here, altho' the Soil will admit of their Operation; becauſe the Two-wheel Wood-chip eaſy drawn Plough, anſwers their End much better, on account of their ſowing great Quantities of artificial Graſſes for feeding their ſuckling Ewes, which they find very much anſwer their Intereſt, in letting their Land lie down with them two Years together; accordingly they are encouraged to be at extraordinary Expence for increaſing ſuch their Graſs Crops, by ſowing the ſucceeding Spring, after their Barley is got off, *London* Coal Aſhes, over all their artificial Graſs, which ſerves for improving two Years Crops. As for Peaſe, they ſeldom ſow any here, becauſe their dry huſky gravelly Ground is not agreeable to them; for, if they ſow them, they rarely have a tolerable Return, unleſs it be a wet Summer, that ſeldom happens above once in five Years; and thus they are deprived of enjoying

joying that valuable Fodder Peaſe-ſtraw; which to ſupply, they give their Horſes ———, and other Cattle, Wheat-ſtraw, till the Time of ſowing their Barley and Oats; and then they give them Clover-hay, which almoſt every Farmer keeps by him in Ricks or Cocks; for Oat-ſtraw they hold here to be a very pernicious Fodder, as being ſubject to breed the Yellows, and therefore refuſe to give it their Beaſts.

The Proceſs of preparing a Pea-ſtubble for ſowing Turnep-ſeed in a ſtiff Soil, in May *following.*——— The Hog-peaſe were ſown in two Bout-lands, and their Stubble, at the Beginning of this Month, was plowed into Broad-lands and let to lie till *January*, when the Ground was harrowed plain, and plowed a-croſs into Broad-lands again; then, in *April* following, it was harrowed and hacked a-croſs. Next, in *May*, it was harrowed plain, and then directly plowed and ſowed with Turnep-ſeed in Broad-lands, on which the Fold was immediately ſet, and employed till the Turneps were got too big for continuing it. Some Farmers give their ſtiff Loams no more after they have hacked them, but harrow the Hacks down plain, and ſow and harrow in their Turnep-ſeed in *May*, for drawing them to ſell in Harveſt-time, which is the Seaſon for ſelling them about the Country, or at *London*, for a good Price.

The Proceſs of preparing light Soils for ſowing Turnep-ſeed in April, *or* May.—Fallow your Gravels, Chalks, ſandy Loams, *&c.* the Beginning of this Month in Broad-lands; and, if there have been Froſts ſufficient to ſhoal them, harrow all plain about mid *April*, and the latter End of that Month, or in *May*, ſpread over it rotten Dung, and plow it in; then harrow once in a Place, if the Earth is fine; if rough, twice in a Place, and ſow your Turnep-ſeed, and harrow it in only once in a Place, for twice will bury it too deep. If Turnep-ſeed

is sown in *March*, it is ten to one Odds, if they apple.

CHAP IV.

Of Plowings for Lent-Grain, *in* Middlesex.

Of Plowing Bout-lands in Middlesex, *preparatory for Sowing Barley in the same Lands at the Spring.* — Their Soil in most Parts of this Country is a very heavy Sort, lying low and wet: Therefore they are forced to plow it, oftener than any Way, in three and four Bout-lands for Wheat, Beans, and Pease; but for Barley, the last Time, in broader Lands thus: In this Month they fallow the Land, that was sown with Wheat the Year before, for Barley; for here they seldom or never make an intire Tilth for Barley; and when they begin to fallow, they plow their four Bout-lands into three Bout-lands with their Swing-Plough. Next, in mid *February*, they plow three of these three Bout-lands together, or into one broader Land. In *March*, they plow their Ground the same Way into broader Lands for sowing it with Barley; or take it as follows thus: As soon as their Wheat is sowed, and they have full Leisure, they plow their four Bout-lands, that before were sown with Wheat, into three Bout-lands. And, in *February* following, they plow three of these Lands together into one, and sometimes they plow five or six of these three Bout-lands into one Broad-land: That is, they plow these Bout-lands into lesser or broader Lands, as the Ground lies wetter or drier. The drier they lie, the more they plow together; then in *March* they harrow all down plain, and plow and sow Half their Barley-seed under Thorough; and the other Half they sow and harrow in. But

more

more of this in *February* and *March*. In the mean Time I muſt here remark, that tho' the late moſt ingenious Mr. *Tull* invented the niceſt Drill-Plough that any Man ever did before him; yet they will not be ſerviceable here for ſowing Barley-ſeed in Drills out of their Hoppers; becauſe this Soil is too heavy and wet for the Purpoſe. Therefore, if an Author was to confine his Pen wholly to the Management of Drill-ploughs, he could not give an Account how Corn-graſſes, and ſome other Vegetables, are to be ſown here and in many other Sorts of Soils and Situations: As in Vales, and in too ſtony Grounds; which obliges me to write in a more general Manner, and ſhew how moſt, or all, Ploughs uſed in *England* may be made to improve Crops of Grain, Graſſes, *&c.* But more of this in *February* and *March*, when I intend to give an Account how Barley-ſeed may be much improved, for producing larger Crops than ordinary by ſeveral Methods of Preparation; for, in theſe clayey wet Soils, ſuch a Preparation of the Seed will be abſolutely neceſſary; becauſe here their common Quantity of Barley, at Harveſt, is but two or three Quarters on a Acre: Whereas by a right Preparation of the Ground, and the ſame by the Barley-ſeed, there will, by the Bleſſing of Heaven, be a Crop of ſix or ſeven Quarters on an Acre.

Of plowing Barley-ſtubbles, for preparing the ſame Land to ſow Peaſe in. — Here their uſual Way is to ſow their Wheat-ſtubbles with Beans, and their Barley-ſtubbles with Peaſe. When they are to ſow Peaſe after Barley, they proceed with their Swing-plough, thus: Preſently after Harveſt, or, as ſoon as they can, they plow their Barley-lands into two Bouts and a half Lands, the ſame Way they lay in before, which in this Manner are compoſed of five Furrows. Next, —— ſome Time

in *December*, they plow two of theſe Narrow-lands together; and then they make a broader Land of five Bouts each, which lie ſo till *March*, when they ſow their Peaſe broad-caſt, and harrow them in, if the Ground is a rough Clay; but, where the Ground is a fine Loam, they ſow their Peaſe in Drills out of a Man's Hand, and cover them with a Harrow: And this they do, by making four Thoroughs, or Drills, in each five Bout-land; and, about a Month or ſix Weeks after, they draw a Horſe-break between the Rows of Peaſe, to ſtir the Ground, and prevent the Growth of Weeds; and thus again, about a Month after the firſt Horſe-breaking. Beſides which, they are very careful to turn their Rows of Peaſe four or five Times in a Summer, for their better Ripening and Gathering; for here they gather their Drill-peaſe as Peaſcods, and ſell them in their green Pods at a *London* Market, for ſeveral Weeks together. And, for this Purpoſe, they ſow the forward Hotſpur-peaſe, *Eſſex Roading-peaſe*, and the great blue Union-pea. If the Ground lies rough and hard, when they ſow and drill Peaſe, they only hand-hough between their Rows, and not draw the Horſe-break, which here is not proper to be done, as they ſay: But this is, becauſe they are not acquainted with a particular Sort, that I ſaw in my Travels, and which, I am perſuaded, would anſwer their Purpoſe in any rough Ground, where Peaſe are ſown in Drills in the Length-way of their Lands. Some ſow the Maſter Hotſpur-pea in *November*, as being the moſt hardy Hotſpur of all others.

Of plowing Wheat-ſtubbles, preparatory for ſowing the ſame Land with Horſe-beans. — Here they give their four Bout-lands one Plowing into four Bout-lands again, in *January*; ſow their Beans broad-caſt, and harrow them in, elſe they believe they ſhall bury them in their clayey Loams. Some again,

again, where they make their Ground fine accordingly, ſow Horſe-beans out of a Sort of Drill-plough, which is uſed no-where elſe but in the heavy wet Soils of *Middleſex*, and in ſome Vales. Others again, after the Ridge, or Broad-land, is prepared, will, with a Hand-hough, make Drills a-croſs ſuch a Land, and ſow Beans in them by the Hand. Others alſo ſet them in Rows, by a ſmall Dibber; but more of this in the Months of *February*, or *March*. In the mean time, I ſhall here make ſome Remarks on Farming, as it is carried on in theſe Parts, *viz.*

Remarks on the Middleſex *Way of Farming.*— It is certain, that theſe *Middleſex*-Farmers, who live within five, ſix, or eight Miles of *London*, enjoy a very profitable Opportunity of getting Money by ſowing and ſelling Peaſe in their green Pods. And, ſince they have got into the Drill-Way of ſowing and ſelling Peaſe in their green Pods, they make no Fallow, and thereby reap a Benefit from their Land, by an every Year Crop at leaſt. But, with this Sweet-meat, they have ſometimes ſour Sauce; for, as their Ground is a very heavy wet Sort, they can't ſo well plow, ſweeten, fine it, and kill Weeds, but that the Wild-oat is very apt to come up and plague them in their Wheat, Barley, or other Crops, that can't be houghed, or horſe-breaked; and this, becauſe they ſow their Land conſtantly, without giving it the uſual Reſt in the Fallow-ſeaſon. This made a Gentleman ſay, who held Land in his own Hands in theſe Parts, That he could always make a Fallow of his Ground every third Year, becauſe, by this Means, his Crops of Wheat, Barley, and Beans, *&c.* were far better than theirs, who ſo harraſs and employ their Land every Year under Crops of Grain: Beſides which, there was this Conveniency attending ſuch his Management, that

he

he thereby avoided having, about his Houſe and Fields, great Numbers of ſtrolling Vagrants, who generally are ſuch Thieves, that whatſoever they can lay their Hands on, for making a Penny, it is theirs; which thoſe Farmers are obliged to entertain for ſome Months in a Year, who carry on the Pod-buſineſs for ſowing Peaſe and Broad-beans and ſelling them in their green Condition.

Plowing Land in Middleſex, *for ſowing it with Oats.* — Here they ſeldom ſow Oats, becauſe they begger their Ground, and are not ſo agreeable to their Soil as Horſe-beans; but as they do ſometimes ſow Oats, I am here to obſerve, that, for this Purpoſe, they give their Ground two Plowings in all. One is to be performed in laſt, or in this Month, and the other at Sowing time. The firſt is done by plowing their four Bout-wheat-lands into four Bout-lands; and, at the laſt Time, by plowing two or three four Bout-lands into one Broad-land; and then they ſow and harrow in their Oats, which I muſt own, return them a more profitable Crop, than Barley generally does, becauſe they are ignorant of a certain Method how to improve their Barley Crop to the greateſt Advantage, and which they have a greater Opportunity of doing than many others, as they lie nearer to *London* than Thouſands of others, who cannot have for Money ſuch fertiliſing Manures and Dreſſings, as they can. But, of this improving Method, I intend to write a good Account, in *March*.

CHAP.

CHAP. V.

Of Plowing Vale-Lands for Lent-Grain.

OF Plowing Lands in Vales, preparatory to Sowing them with Barley. —— There are two Ways of managing Vale-lands, for ſowing them with Barley-ſeed in the Spring-ſeaſon. One is by ſowing this Seed for a Hitch-crop, and the other for a Tilth-crop, where Land is deſigned to be ſown for a Hitch-crop. About *Allhollantide* they plow up their Wheat-ſtubble, or better ſooner; and then lay on their Dung, to plow it in for rotting and meliorating the Ground againſt *March*, when they plow and ſow their Barley: Others lay no Dung on it at Fallow-time, but truſt to their Hand-dreſſing or Manure, which they throw over the Land as ſoon as it is ſown, as Hens-dung, or Pigeons-dung, or Soot, or Malt-duſt, *&c.* but where Tilth-grounds are deſigned to be ſown with Barley, as I have obſerved in former Months, they fallow in *April*, or *May*, and commonly lay on and plow in their Long-dung, at the firſt or ſecond Stirree-time, which is performed in *July*, or about *Allhollantide*, lie to rot, and meliorate the Land againſt Barley-ſeaſon in *March*; for which ſome plow four Times in all, others three, according as the Weather happens. If a very dry Summer precedes the Sowing of Barley, three times Plowing in all may do, as it did in 1740. At this Stirree-time in *November*, they ridge up their Vale-lands with their Foot-plough, either for a Hitch or Tilth-crop.

Why they plow their Vale-lands but once —— for ſowing —— them with Peaſe or Beans. — This Sort of Ground, as it generally lies flat, low, and wettiſh, they plow but once for ſowing it, either with

with Peaſe or Beans in the Spring-time. And why they do ſo is, becauſe, if they winter-plow for theſe, they commonly ſuffer, by the Loſs of great Part of their expected good Crops; by Reaſon if they break up their heavy Ground in any Part of the Winter, it is the more expoſed to the Sug and Waſh of Rains, and to the Loſs of its Spirits or Strength. Whereas, when their Ridge-acre, Half-acre, or Rood-lands, lie all the Winter undiſturbed till *February* or *March* in whole Ground; then their Earth will plow up in a freſh, lively, dryiſh Condition, and revive and nouriſh the Pea, or Horſe-bean-ſeed in ſuch a Manner, as to carry the Crop forward in a vigorous Growth; and eſpecially, if they enjoy a right Seaſon at Sowing-time. This Item, againſt Plowing up Ground in a wrong Seaſon, is not only neceſſary to be obſerved by Vale-Farmers, but alſo by all others; for a Man may begger his Lands by many Ways of Ill-managing it; and, in particular, by this of plowing it too often, or too ſoon; which further ſhews, how much the Art of Farming depends on the Conduct of the Maſter, or his Ploughman. I, as well as many others, am ſenſible that moſt Authors have omitted writing cloſe enough on this material Article, which juſtly deſerves a longer Diſcourſe than at preſent I ſhall beſtow on it; for here I ſhall only obſerve, that both light and heavy Soils may be plowed too ſoon, and too often, to the great Damage of the Farmer. The Light, by expoſing its Mould to be diminiſhed by the Waſh of Rains; and the Heavy, by expoſing it to the Sug and Lodgment of Waters: Both which Caſes tend to the Leſſening and Exhauſting of the Subſtance and Spirit of the Earth, and to the Impoveriſhment of their Crops. But ſome may think, that, by giving theſe Vale-lands only one Plowing or Sowing-time, the Earth will be

too

too rough and clotty for the Seed-beans. On the Contrary, the Vale-Farmers like it beſt, when it is ſo; for then they know a heavy Thorough, or Furrow, will be turned on the Horſe-beans, lie cloſe and moiſt on them, and ſhelter their Roots afterwards from the Violence of Froſts and Droughts; and their Heads, or Firſt-ſprouts, will eaſily make their Way through their thick Surface; becauſe, as theſe Vale-earths generally partake of a marly Nature, their upper Part is perſently ſhattered by a ſmall Froſt into a crumbling looſe Condition.

CHAP. VI.

Of Dungs *and* Manures *proper for* Corn *and* Graſs-Grounds *in this Month.*

OF Laying Dung on Wheat, or what is called Top-Dreſſing. —— In this Month, it is excellent Huſbandry to begin Laying your Stable-dung and Horſe-litter on your Wheat, and ſo continue doing all the forward Part of the Winter. But the Difficulty is how to get it on in wettiſh Seaſons, as it is ſometimes neceſſary to do, before the Wheat gets too rank in its Growth. And a Load of ſuch Dung carried directly out of the Stable, and ſpread over the Ground, is worth two or three that has been laid Abroad and waſhed: Therefore draw it into the Field, and, to avoid Carting over the Land, ſhoot it down in one Heap, and then two Men may carry it on the Wheat in a Hand-barrow, in order to ſpread it afterwards. But, in Caſe Froſts happen ſevere enough to harden the Ground to bear the Wheels free of Impreſſion, then the Dung may be laid in ſmall Heaps, at Pleaſure, and ſpread: This Way carries a great

Benefit with it; for, if you had not Dreſſing enough for your Wheat-land in the Summer, before you ſowed your Wheat, it may be ſupplied this Way, and do great Service, by preventing the Froſts and Winds ſpoiling it by their chilling Quality, and giving the Rains an Opportunity to waſh in the Goodneſs of the Dung, which will be more or leſs efficacious, as the Horſes or Hogs have been fed with Corn, Beans eſpecially; becauſe the Salt or Sulphur of ſuch Corn is hereby communicated to the Land to its Enriching. I know there is an Objection againſt this raw Dreſſing, by which, ſome may object and ſay, the Seeds of Weeds and whole Oats, that Horſes may void, will, in Courſe, take Root and grow. But this is frivolous, becauſe, if ſuch Seeds ſhould be ſcattered on the Surface, it is very improbable they ſhould grow; as being more than ordinary liable to meet ſuch Froſts at this Time of Year, as will in Courſe ſpoil their Taking Root on the open Surface. I was myſelf convinced of the great Good ſuch Top-dreſſing did, when applied in this Manner, by the Succeſs of one of my Neighbours, who every Year followed this Practice, that ſhewed the Fertility of the Ground it was put on, a Year or two after, by the Bulk of the Crops; for as the Horſe, in particular, eats the beſt and moſt Variety of Corn, and has the hotteſt Body of all Beaſts for digeſting it, it is no Wonder their Dung and Stale ſhould cauſe ſuch vaſt Returns of Grain. And the ſooner ſuch Stable-dung, either new made or rotted into a Shortneſs, is laid on the Wheat, the better it will be, even if it could be done as ſoon as the Grain is ſown; becauſe then the firſt Sprouts or Sprigs of the Wheat will eaſily make their Way through the Dung; for, when Dungs are put on later, they are very apt to ſtop the

the Progreſs or Growth of the Blade, cauſe it to turn yellow, and die.

The ſeveral Ways of ſaving and improving Horſe, Swine, and other Dungs, and the great Loſſes ſhewn, that Farmers ſuſtain, by the ill Management of them. ——About *Allhollantide*, is the uſual Time, that we Farmers take up our Plough and Cart-horſes, from Graſs, into the Stable, becauſe great Rains, or Froſts and Snows, frequently happen at this Time of Year, that render the Weather unſeaſonable for their being kept abroad Night and Day: Yet ſome Farmers, to hitch and lengthen out their Stable-food, and to keep their Horſes in Health, will turn them out in the Day-time, for a few Weeks afterwards. But of this more by and bye, for here I am engaged to write on one of the moſt material Articles in *Huſbandry*, and therefore deſerves the Farmers greateſt Notice; and becauſe, where one Farmer manages this Matter right, I believe I may venture to ſay, there are twenty that do it wrong, whereby they loſe great Part of their precious Dung: *Precious* I call it, (as diſdainful as the Name of it is with ſome People) for, ſo much as a Farmer loſes of this, ſo much he proportionably ſuffers in the Loſs of his Crops, and in a Deficiency of raiſing his Rent; which leads me, in the firſt Place, to obſerve the bad Œconomy that many Farmers are guilty of in this Reſpect.

How a Farmer may ſuſtain a great Loſs in the ill Management of his Dungs. —— I know only one Farmer beſides myſelf, even in the Pariſh where I live, but what expoſes both their long and ſhort Dung to the Waſh of Rains, by throwing it out of the Stable into the Farm-yard, and laying it all over the ſame in a thin Condition; which conſequently gives the deſcending Waters an Opportunity of waſhing away the Corn, and beſt Part of their Dung; and this the more, as the Weight of

Horſes, Cows, Sheep, and Hogs Bodies compreſs and ſqueeſe out the Goodneſs or Quinteſſence of ſuch Dung, and leaves behind little more than the huſky, ſpungy Straw-part of it for the Farmer's Uſe. Here is Husbandry with a Witneſs! I mean ill Husbandry; for ſo it is in the higheſt Degree, as I am going further to make appear, by aſſerting it to be too general a Practice with ſome ſilly Farmers, not only to ſuffer their Dung to be laid in the Farm-yard, and have its Goodneſs waſhed out, but alſo to ſuffer this liquid Goodneſs to run away into a common Road or Drain, ſo as never to be enjoyed by him; and this during the whole Year. A Damage, I believe I may ſay, committed on himſelf in an infinite Degree; for where a great Farmer loſes his Dung in this Manner, who can tell where the Loſs may end, as Dung affects his Land, not only in the next Crop, but alſo in many afterwards? For as the Produce of the firſt Wheat-crop is, ſo is the ſecond *Lent* Crop better or worſe; and ſo on, as theſe return more or leſs Corn and Straw, and them Dungs. So their rich Swine-dungs are commonly little better husbanded, becauſe theſe lie in their Hog-yard likewiſe expoſed to the Waſh of Rains, to a great Loſs; and the more ſo, where many of them are kept, and their Dung is made by the Food of Peaſe or Beans, which contain more of the ſaline or ſulphureous Qualities than any other of their Meat beſides. I remember the Sight of a Piece of ill Husbandry I met with on this Account, in *Ayleſbury* Vale, where, tho' the Farmer rented a Hundred and fifty Pounds a Year, yet his Hogs I ſaw feeding in an open Hog-yard up to their Bellies in a ſtanding black Water, and this in the Winter, during all the Time they were fatting; ſo that they could never eat their Meat without coming out of their Stye into this Water, that run into an adjacent great Pond, and

from

from thence, when it overflowed, into another large Pond at a conſiderable Diſtance, and there was partly loſt. His Fowl-dung was alſo husbanded in as bad a Manner, for, though he kept the beſt Part of a hundred Cocks, Hens, and Chickens, yet he ſuffered as many as would, to rooſt on Trees, and elſewhere, to the Loſs of their Dung, which kept this Farmer poor; but, as poor as he always was, he was careful to lay out ſome of his Money in Soot and Pigeons-dung for Manuring his Ground; and, in doing this, he did well, but neglected his Care at the Fountain-head, for here he ought to have employed it firſt; that is, in ſaving his Dungs in the beſt Manner, as I am going to ſhew.

How a Farmer may obtain great Profit by the good Management of his Dungs. —— As ſoon as Horſes are taken into the Houſe, the Farmer ought to begin Saving their Dung in particular, after this Manner: Suppoſing him to have Conveniencies accordingly, he may keep his ſhort Horſe-dung by itſelf, and the long by itſelf, or both together under Cover. My ſhort Horſe-dung I lay in a Place by itſelf under the Rooſting of Cocks and Hens, whoſe Dung ſtrengthens that of the Horſes, and the Horſes that, by preſerving the Vertue of the Fowl-dung from being exhauſted by the Air; and, to improve both, I oblige my Maid-Servant to employ the Piſs-pot every Morning over theſe Dungs, which helps to rot them the ſooner, and impregnate them with ſuch a fertile Quality, as renders them a moſt rich Compoſt for Manuring Land: And, when it is rotted enough, ſome ſow it by the Hand out of a Seed-cott; others lay it in little Heaps, and ſpread it before or after Corn is ſown, with a three-tine Fork. As for the long Dung, it muſt have a longer Time to rot; but, when both ſhort and long Dung is mixt and lain together,

together, the ſhort helps to rot the long Dung much ſooner. And if Cow and Swine-dung were thus incorporated together with Horſe-dung, and kept under Cover, they would be *Cent. per Cent.* the better for it, in Compariſon of their lying all abroad expoſed to the Weather. But, in Caſe there are not Conveniencies for laying ſuch Dung under Cover, then, as the Beaſt Dungs are made, they ſhould be lain in one great Heap or Dunghill, which next to Cover will preſerve their good Properties in a great Meaſure from the Power of Rains and Droughts; and, as the black Water drains from it, it ought to be carefully preſerved, by cauſing it to run into ſuch a Receptacle or Reſervoir, as will give the Farmer an Opportunity to carry it out in a Tub or Barrel, for throwing it over the Dunghill, or to ſcatter it over Plowed or Graſs-land, over Wheat, Beans, Peaſe, or Oats, in their Infant Growth; or to water Cabbage-plants, or other culinary Roots: For, if Stable or other Dungs were laid thinly over the Farm-yard, the Rains would eaſily waſh through them, and the Sun dry them, and that much more than when ſuch Dungs are laid in a thick Subſtance. But, before I quit this Subject, I muſt obſerve, that I have ſeen a great Farmer lay his Stable-dung under a Granary built high from the Ground on Purpoſe to be a Shelter or Cover for ſomething: Here I ſhould think it improper to lay Dung, becauſe the Steam of Dung is moſt apt to breed a Mould, that is pernicious to every thing it ſettles, or gets to. When Fowls-dungs are kept by themſelves, as often as we have Duſt, offal Chaff, or other Trumpery, fanned out of the Corn, we mix them with ſuch Fowls-dung, which, in Time, will lie, heat, rot, and become an excellent Manure, to be ſown as I ſaid, out of the Hand Seed-cott, and harrowed in with your Barley, or otherwiſe applied.

Dunging

Dunging Graſs-Lays on their Tops that were lately ſown with Wheat. — If you did not top-dreſs your Wheat in laſt Month, that you harrowed in on a Clover-lay, do it at the Beginning of this Month, either with rotten Dung, which is the beſt, or that taken immediately out of the Cow-houſe, Stable, or Hog-ſtye, for the Rains to waſh out their Dung and Piſs, Part on the new-ſown Corn-ſeed, which will nouriſh and cauſe it to throw out a quick Spire, ſo that all Parts of the Dung will be employed to preſerve it in its chipping Infant Growth, againſt the Power of Froſts, which are very apt to kill it, in this its tender young Condition. Now the Difference in laying Dung on new-ſown Wheat, at this Time of Year, and in *January*, *February*, or *March*, is not a little; for by thus laying on Dung in this Month, as I ſaid, the Seeds of Weeds, that may accompany ſuch Dung into the Field, cannot take Root, and grow ſo aſſuredly, as they would, if lain on the Ground in *January*, *February*, or *March*, becauſe now the Froſts generally begin, and the Length of the Winter-weather will, in Courſe, kill them, if they ſhould happen to ſtrike a Root: Whereas, if the Dung was put on late, the growing Seaſon, that is coming directly on, would forward their Growth, and in particular on Account of the deſtructive Burr, which is the Seed of the Cliver, that twines about the Corn, and pulls down the Wheat, before it is ripe, to the Farmer's great Loſs.

How careful the Cheſhum *Farmer is, to lay Dung on his Plowed Ground in this Month.*—At *Cheſhum*, in *Bucks*, a great deal of their Land conſiſts of a ſtiff, rank, red Clay, which to improve for After-crops of Corn, in laſt or in this Month, on his Pea and Oat-ſtubbles, he lays on old Thatch or Horſe-litter, for the Worm to work on, and draw into the Ground all the Winter; ſo that, in *April* following,

following, when they begin to fallow this Land, by this Means, it will be ſo hollow, that it will plow eaſily, and do a vaſt deal of Good; otherwiſe, if this Clay-ground was to remain all Winter without ſome ſuch Management, it would, at Fallow-time, be in a moſt cruſty, hard, ſour Condition, very difficult to plow, and much more difficult to get into a ſweet fine Tilth againſt Wheat-ſowing Seaſon.

How a Farmer damaged his Ground by laying too much Dung on it. —— The Perſon, I here write of, lives about a Mile diſtant from my Houſe, has the Reputation of an excellent Huſbandman, and juſtly deſerves this Character in many Reſpects; but, in this I am about mentioning, he does not, becauſe he generally lays too much Dung on his Ground, for a Wheat-crop eſpecially, which cauſes the Land to be ſo hollow, as not to be ſtiff enough to keep up the Wheat, when it is in its green Ear; and when it thus falls down, the Sap is checked in its free Aſcent, and the Kernels thereby prevented arriving at a full Maturity and Bigneſs; which is a plain Proof that Land may be made too rich as well as too poor, for getting a full Crop of Wheat or other Grain on it; for if a hungry, binding, gravelly, loamy Soil (as this Man's is) may be thus damaged by an indiſcreet Dreſſing it with Dung, intire rich Loams may be ſooner brought into ſuch a prejudicial Condition, by the ſame ill Management.

Dreſſing Plowed Ground by the Fold. —— In this, or in any of the following Winter Months, when you fold on new-ſown Wheat, put a Rack in the Fold for feeding the Sheep with Straw, otherwiſe, as the Graſs, at this Time of Year, is very watery and flaſhy, the Gripes, or Cholic, will very likely kill ſome of them; which is not only occaſioned by the flaſhy Graſs, but alſo by the Wet and Coldneſs

of

of the Ground, and chilly Earth that now is apt to ſtick about their Feet and Legs; and when Sheep are thus taken with this fatal Diſtemper, it may be diſcovered by their Drooping, Grating their Teeth, Riſing up, and Lying down frequently and ſuddenly, and ſometimes it is ſo bad as to ſwell their Belly. Hay, where it can be afforded, is certainly better than Straw for this Purpoſe; but it is uſual to feed them with Straw, and of all Straws, Pea, Thetch, or Wheat-ſtraw is beſt on this Account, becauſe their Seeds, which may drop out, will not ſtain and damage the Wheat, as thoſe out of Oat or Barley-ſtraw will. Theſe Straws are alſo very ſerviceable in a Fold in the Winter-Seaſon, to keep the Sheep from gathering Water in their Bellies, and preventing thoſe other Illneſſes incident to theſe Creatures, when confined to the Fold in cold and wet Weather. But ſuch Fold-feeding in a Rack is moſt neceſſary, when Sheep are kept on Turneps; for, as this is a moſt ſucculent Root, it conſequently lodges a great deal of its watery Juice in the Beaſt, which by this Hay or Straw-feed is very much prevented. Late Folding on gravelly Grounds is beſt, becauſe this Soil devours forward Dreſſing ſooner than any other Land.

Dreſſing Plowed-ground with Cows Hair.—Cows, Bulls, or Oxen Hair, is bought by the Buſhel, as I have ſhewn in my former Works; and is of great Service in the Improvement of Wheat-crops, as well as Barley-crops. If for Wheat, we ſow it out of a Seed-cott by the Hand over Gravels, Chalks, and Loams; and this, both in dry and wet Earths, juſt before the laſt Plowing; and then we plow it in with our Wheat-ſeed, either in two Bout-lands, or in Broad-lands.

How a Gentleman dreſſed his Meadow-Ground in Hertfordſhire.—It is true, that general Folding on Wheat, in our *Chilturn* Country, is laid aſide,

about *Allhollantide*; but with ſome particular Farmers, it is carried on both Winter and Summer: That is, thoſe who keep all Ewes, or a Mixture of Ewes and Weathers for a Common Flock, generally give over Folding on Plowed-ground, the Beginning of this Month. But ſome others, who are poſſeſſed of incloſed dry gravelly, or dry loamy, or chalky, or ſandy Land, keep on the Fold at Times all the Year, and ſupport their Weather-ſtock accordingly, as I ſaid, by the Help of a Rack of Hay or Straw, or by Turneps, Rye, Cole, Thetches, or Clover. Others, again, will fold on their Meadow-ground for improving it to a great Degree, as a late Gentleman uſed to do in the Pariſh of *Studham* in *Hertfordſhire*; who, as ſoon as he had done Folding on his Wheat-land, about *Allhollantide*, removed his Fold to the Meadow, and there began Folding on the ſame; for here it does great Service, becauſe now neither the Sun nor Air can dry up the Dung, nor exhauſt its Vertue; and it is now that Sheep kill the preſent Moſs, and hinder the Breed of more by their Tread, by the Warmth of their Bodies, and by their Dung and Stale, which is readily received by the Earth, as it is now in a ſoft Condition; and which will be of more Service, if ſome Straw is laid every Night on the Ground where the Sheep are to lie, and Hay or Straw given them in a Rack. But, to do this in the moſt efficacious Manner, ſome of the niceſt Farmers fold two Nights together, on one and the ſame Piece of Ground; and then it will ſurely anſwer their End, and not hurt the Sheep, provided they are not folded in too wet Weather; and this is one Reaſon why they lay ſome Straw at the Bottom of the Fold, becauſe it defends their Bodies from the bare Ground, which, in Winter, is very apt to draw the Heat out of the Sheeps Bodies, and lodge a prejudicial Coldneſs

in

in its Room. When Folding is hired, the common Price is Threepence a Score for Sheep each Night; but I can't ſay, ſuch Hiring is made uſe of in Winter, becauſe thoſe that keep Flocks, to let out, are generally poor Men, that can't afford to feed their Sheep accordingly; and therefore ſuch only fold in the Summer-Time at ſo much a Score, by the Help of Commons, or for a Conſideration given them in another Way; as I intend hereafter to give an Account of, when I write *of the good and bad Properties of Incloſures.* This is one Way of Improving our Meadow-ground; but there are ſeveral others made uſe of at another Seaſon; ſome one of which requires to be done almoſt every Year in our flat, wet Meadow-land, whoſe Bottom is a Clay, as many are in our Parts, or elſe the haſty Breed of the deſtructive Moſs will enſue, cripple our Crops of Graſs, and render the Tenant uncapable of paying thirty Shillings for each Acre a Year, as the common Price is hereabouts.

How a Farmer-Grazier, in Buckinghamſhire, *dreſſed his Meadow-ground.*—— This Tenant lives about three Miles diſtant from *Ivingboe*, where he occupies both low and high Meadow-ground of different Soils. That which lies on a Hill is of a gravelly Nature, and very apt to cauſe the Graſs on it to burn or dry away in hot Weather, and great Droughts: He therefore begins Foddering his Cows in this Month, if the Seaſon is attended with hard Froſts or Snows; and he obſerves commonly to do it, from the Hedges, that the Cows may feed and lie the moſt towards the Middle-part of the Field; and, by this Means, he obliges the Cattle to dreſs that Ground which lies moſt from the Hedges, for this Reaſon; becauſe, here, the Graſs is moſtly expoſed to the Heat of the Sun, and therefore the ſooner burnt up: But, by Foddering his Cows from the Hedges, it ſo enriches the moſt open Part of the Field, that he has always

the rankeſt Graſs there; which being thus forced up into an early Head or Cover, it ſhades the Roots, and forwards the Growth of the Graſs to his great Profit. And it is for this Reaſon, that ſome foreſighted Landlords have formerly planted here and there a Tree in the open Part of their Meadow-fields, in order to intice Cattle to lie under the Shelter of their Boughs, and rub their Bodies againſt their Trunks, to allay that Itching, which thriving Beaſts are generally ſubject to. Thus he dreſſes his gravelly Meadow-ground with a Dung moſt natural to it, for Cow-dung, being a fat, rank, cool Sort, conſequently beſt agrees with ſandy, gravelly, and ſuch other dry, huſky Soils; and the better, when ſuch Dung is made from the Food of Hay, Straw, or other hard Meat.

Dunging Middleſex *Meadow-Ground.*——In *September*, *October*, and in this Month, when the Graſs is eaten off, they commonly here dreſs their Meadow-ground, as I have in theſe preceding Months obſerved, by bringing as back Carriage, after they have delivered their Hay at *London*, Lay-ſtall Muck, which is compoſed of Aſhes and Street-dirt. This they bring Home, and ſhoot it out of their Carts on a begun Dunghill, that thus they augment, till the Heap is big enough to lie intire, for turning once, twice, or thrice, by Way of getting it into a very fine Condition for laying and ſpreading it over the Meadow-ground. Or thus: In this Month dung your Meadows with old rotten Dung, or a Compoſition of Lime, Aſhes, Mould, and Dung, or with only Mud, ſmall Chalk, and Dung, mixed and turned ſeveral Times in the preceding Summer, till it is very fine indeed. Of this the *Hendon* and *Edgware* Farmers are the beſt Examples of all others I know of, as being ſo nice in picking out all Rubbiſh and Graſs Stuff, that, before they put it on their Meadow, it is almoſt fit to run through a Sieve; and then it is in a right-

Condition

Condition to put and ſpread over the Land, to be eaſily and preſently waſhed down by the Rain, on the ſmall Fibres of the Graſs Roots, where it will lie, keep them warm all the Winter, and defend them againſt the deſtructive Froſts and Wets.

Dreſſing Vale Meadow-Ground. —— Here their Land is ſo good, that few beſtow Dreſſing upon it. But I knew a Gentleman that was at a conſiderable Charge in buying great Quantities of Pot-aſhes for improving his Meadow-ground, which, about this Time of Year, he had throwed about with a Shovel, to lie and be waſhed in by the Winter Rains; and they did a vaſt deal of Good for ſeveral Years after. So that though moſt Vale-Farmers truſt wholly to the Dung and Urine of their Cattle to dreſs their Vale Meadow-ground; yet this Gentleman's Meadow, that was thus dreſſed, paid him very well for his extraordinary Expence, though it is as good Land as moſt in the Vale of *Ayleſbury*.

How a Farmer dreſſed his new-ſown Wheat with Soot, in this Month, in order to eat it off in January *following.*—This uncommon Action was performed by a Farmer who rented a Hundred a Year, a little more than a Mile from my Houſe, which proved him to be a bold, but judicious Adventurer, as I ſhall make appear. The Caſe was thus: This Farmer having a large incloſed Field of new-ſown Wheat, whoſe Soil was a chalky Loam, that lay flat, and ſheltered very much from all Winds, was encouraged to ſow twenty Buſhels of Soot on each Acre of it, at the Beginning of this Month, in order to bring on an expeditious Cover, or Head, on the Wheat-roots; (for, of all our common Manures, none forces ſo quick, and ſo ſtrong as Soot) that might ſerve inſtead of ſo much Graſs for feeding and ſubſiſting his Flock of Sheep in the ſevere, cold, chilly Month of *January*; and it fully anſwered his End: For in that Month, it had got

ſo

ſo large a Head of Wheat-blades, as fed his Sheep for a Month or ſix Weeks; which enabled him to continue Folding his Weathers, all, or moſt, of the Time, on the fed Wheat, as it was eaten off, and parted by a Row of Hurdles. Now, the Soil of this Field being of a very dry warm Nature, the Sheep fed on the Wheat, and lay in the Fold of the ſame Ground, free of that Daubing and Chillineſs, which a Clay, or a wet loamy Soil, would expoſe them to, and damage their Bodies; and thus did a vaſt Service, in leaving an additional Dreſſing behind them, that enriched the Crop of Wheat, by thickening the Land, invigorating its Roots, and bringing on a branching Growth of ſtrong Stalks, and large Ears. I am here alſo to remark, that this Action was performed with great Judgment; for this Farmer knew very well, that this Piece of Dry-ground was the cleareſt and freeeſt of Weeds of any he rented; and therefore he ventured and ſucceeded; for, had this Field been of a contrary Soil, the Conſequence might reaſonably be expected to have been the endangering the Crop of Wheat; becauſe, if ſuch a Crop had been obtained in a clay, or wet, loamy Soil, it would not have done the Sheep half the Service it did in this chalky Soil; and what might have been worſe ſtill, the natural Chilneſs of ſuch Ground, and the Coldneſs of the Seaſon, might have ſo checked the ſecond Growth of the Wheat—as to give the Weeds an Opportunity of getting the Dominion of it, and crippling the Crop, to the Impoveriſhing of the Farmer, as I could make appear by ſeveral Inſtances, were it proper in this Place. This Piece of extraordinary good Huſbandry I have been the more particular in relating; as it may remind the judicious Farmer, and inſtruct the ignorant one, in the Improvement of his dry, huſky, chalky Soil, which, tho' commonly let for a mean Rent, on account

account of its looſe poor Nature, yet by a Management, adequate to its Quality, it may be made to produce as good a Crop of Wheat, as a Vale ſtiff Soil, that is in its original Nature, far richer than a dry chalky one.

How a Farmer folded his Hogs on his new-ſown Wheat, for improving its Crop. —— This was done by a Farmer, near *Ivinghoe*, who rented about ſixty Pounds a Year, and lived in a Farm that had great Numbers of large Beech-Trees growing on the ſame; which gave him an Opportunity of keeping ſometimes a conſiderable Herd of Swine, by the Help chiefly of Beech-maſte; and, to make the moſt of theſe Animals, he endeavoured to croſs the Old Saying, *That a Hog is good for Nothing, till he is dead*, — by folding them on ſome of his dry, poor, chalky Ground that was ſown with Wheat. Accordingly he got a Parcel of very ſtrong Hurdles with their Stakes made for folding his Hogs in the ſame on his new-ſown Wheat, which he did every Night, beginning about *Michaelmas*, and continuing the ſame, good Part of the Maſte-ſeaſon; and this he did the ſafer, by keeping his Hogs duly wrung, and confining them in a very ſtrong Fold, which cauſed them to dung in large Quantities, and tread it in on the Wheat, when they had done; by which the Swine ſo cloſed this light, ſhort, chalky Earth, as to make the Wheat grow into a large Crop, and ſtand faſt and upright all the next Summer; and thus prevented the Wheat from falling down in its green Growth, which otherwiſe, in this looſe Soil, it is very apt, as I ſaid, to do, to the Farmer's great Loſs.

How a proper Manure, timely applied, would have ſaved a Wheat-crop from being ſpoiled by Worms.— Theſe are deſtructive Inſects to both Corn and Graſs, and eſpecially to Wheat, that generally lies longer in the Ground than moſt other Grain; and

and this their Miſchief they commit, chiefly in the Infant-growth of the Wheat, by biting in two its Green-blade juſt above the Ground. To prevent which, inſtead of Dunging, that helps to increaſe the Breed of Worms, apply Soot, Coal, or Peat-aſhes, or Lime, or Salt, or other ſuch ſaline Manures; for any of theſe, if timely made Uſe of, will drive them below the Corn or Graſs; for Salt, whether in a fixed, or looſe Condition, is the greateſt Deſtroyer of Inſects and Enemy to Putrefaction, and, indeed, is the beſt Dreſſing for all Sorts of Land and Grain. This has cauſed ſeveral to make Trials of the Efficacy of Rock and Sea-ſalt; and one Gentleman, that lives in *Wiltſhire*, ſowed only ſix Buſhels of a common Salt over one Acre of Corn-ground, and had the beſt Crop in Return that he was ever Maſter of; for it is ſuppoſed, that ſuch a Quantity of all pure Salt is equal to the fixed Salts of twenty or thirty large Loads of Dung; and, had the Duty been kept off, I know ſeveral Gentlemen who would have dreſſed all the Graſs-ground of their Parks with naked Salt, as being a moſt excellent warm Manure, that would not only deſtroy Inſects, but kill the worſe Sort of Graſſes and Weeds, and bring on a better Sort; as I have more amply made appear in my *Chilturn*, and *Vale-Farmer*, at Page 359, where I have propoſed a Method for the Farmer's enjoying this moſt neceſſary Manure, without paying Duty for it, by having Earth mixed with it at the Place of Sale; but an Objection was made to this, that the Chymiſt could ſeparate it. This Manure, had it been applied in Time, would have ſaved a noble Crop of Wheat, that I knew a Neighbour of mine loſe by the ſmall Red-worm. The Wheat was ſown on a Clover-lay, which, by lying down under this Graſs, I think, two Years, gave the Worm Leiſure to breed in a gravelly loamy Soil; inſo-

much

much, that, on the Sprouting of the Seed, they began their Rapine, and continued it till about *Candlemas*, when the Farmer ſowed Soot all over it, but it proved too late; for thoſe Inſects had ſpoiled moſt of the Crop by that Time. Had he ſowed Salt, or Soot, or Lime, or Peat-aſhes, *&c.* over his new-ſown Crop of Wheat at *Allhollantide*, it would have ſaved it. But, as it was, the Farmer loſt moſt of the Crop to (as I heard) the Loſs of twenty or more Pounds.

CHAP. VII.

Of the different Management of Turnep-Crops.

OF various Methods neceſſary to be uſed in the Management of Turnep-Crops in this Month. — Although Turneps, in ſome Places, are drawn to be ſold in *Auguſt*, *September*, *October*, &c. and carried out of *Hertfordſhire*, even twenty-five Miles in Length, to *London* Market, for obtaining the greateſt Price; becauſe as our County in ſome Places abounds with Gravels, Chalks, Sands, and Dry-loams, that are dreſſed, for the moſt Part, by the Folding of Sheep, or with the pure Manures of Malt-Duſt, Oil-cake Powder, Lime, *&c.* which give the Turnep the ſweeteſt Taſte: Yet our common Way is not to begin eating our Field-Turneps deſigned for fatting Sheep, till *Allhollantide*, or for fatting Cows or Bullocks with them, becauſe as the Weather is generally mild enough to graze our Sheep in our incloſed Grounds to this Time, and thereby fat them in Part, we forbear, till this Month, to feed them altogether on our Turneps; but theſe I ſhall more particularly enlarge on, as follows, *viz.*

Of Drawing Turneps, and Preſerving them, at Leighton *in* Bedfordſhire. —— If any think fit to enjoy the excellent wholeſome Root of a Turnep in a pure ſound Condition, they ſhould be drawn in laſt, or this Month at fartheſt, to be put in Sand in a Cellar, or other Place, for their Conſervation. At *Leighton*, in their ſandy Ground, they make Holes about a Foot and a half deep, and as much broad, wherein they lay their drawn Turneps, for keeping them againſt the Spring-ſeaſon. Now theſe Trenches, or Holes, are made as long as are wanting, but their Depth and Breadth muſt be as I have obſerved; becauſe, if they were made deeper and wider, the Turneps would heat and grow. In doing this, they cut off all the Tops of the Turneps, but not the Root-part, and cover the Turneps and Foſs with Earth, Ridge-wiſe; and, if great Froſts happen, ſome Straw, or Litter, may be laid over all.

Of Feeding and Fattening of Sheep with Turneps. ——About *Allhollantide*, many begin to feed their Sheep with Turneps in one Field, while in others they are ſtill growing, that the Farmer may enjoy his Turnep-crops, ſome Time, in the greateſt Perfection; for, in this Month, we have ſometimes ſharp Froſts, that will cauſe the Leaves of the Turneps to look yellow and couch, and then the Apple-part enlarges itſelf, as the Leaves did before; for now the Root has the Effect of all the Ground to itſelf. Six large Weather-ſheep, or eight ſmall ones, may be put into one Acre of Turneps, to fat; but it muſt be a good Acre of them that will do this, and good Management withall; for the Sheep muſt be ſhifted in Time, by removing a Row of Hurdles, croſs the Field; and the Turneps, when ſcooped even with the Ground, muſt be pecked up, before they are too much trodden, ſtained, and rotted. The Wea-

Weather-ſheep prefer the Root; but the Ewes and Lambs generally the Leaf; and therefore they often put their Ewes in firſt, and the Weathers after, as Occaſion requires, and ſometimes both together. If Weather-ſheep are taken in to fat, the Price is four Pence a Head *per* Week, and no more for a Ewe with its Lamb. Some Weathers will fatten in twelve Weeks, others in ſixteen, according as they are, when they firſt go in.

N. B. The Froſt wrongs an old Turnep, but does not ſo much hurt a young one. A Turnep will grow, though it be ſcooped. By this Method of removing a Row of Hurdles, as the Turneps are fed off, the Sheep enjoy a full Liberty of feeding. But there is another Way of Feeding of Turneps, as I am going to ſhew. And that is,

A Second Way of feeding and fattening Sheep on Turneps: — Is what a neighbouring Farmer practiſed; who, having only ten Sheep to fatten, fed them in a large Fold a Night and a Day, and then removed it, and ſhifted the Sheep to a freſh Bite, and ſo on. Now, as theſe fat Sheep were daily ſhifted, his Store-ſheep followed in another Fold, that was alſo removed every Day, to eat up thoſe Offal-Turneps the fat Sheep left, and which were daily picked up for them; and thus, by his Double-folding, he generally had the beſt Crops of Barley in our Parts. Others will pull up the Turneps, and give them in a Fold every Day; and, if they are not too large, the Sheep will eat them clean up. *N. B.* After a very hard long Froſt, Turneps, when they have thawed, are apt to rot, ſtink like Carrion, and be of a Poulch. -- It was the Saying of an old Dealer in Sheep, That he would rather give five Pence a Head a Week, to feed and fatten his Sheep on young Turneps, than two Pence a Week on old Turneps; becauſe Sheep thrive as faſt again on the firſt, as they do on the laſt.

Of Feeding and Fattening Bullocks, Oxen, and Cows on Turneps. — The Yellow-Turnep, in *Suffolk* and *Norfolk*, is in great Eſteem for fattening their *Scotch* and *Welch* Runts; becauſe it has, Carrot-like, only one Tap-root, and comes up free of Dirt. Many Farmers here fatten theſe Beaſts wholly upon it, which will eat Top and all, both under and out of Cover. If the Bullocks leave any in the Ground, the Pieces are dug up for their Store-ſheep, which enables them to fold on their Sandy-grounds; for this Turnep buries itſelf a pretty Way in the Earth, and is a ſound Turnep of a carroty Nature, which tempts the Thief. But, beſides this Turnep, they ſow ſeveral other Sorts, for the ſame Uſes, that, according to their ſeveral Natures, they may be fit for Uſe early or late; as the Purple-ſort, Sugar-loaf, and the Cream-coloured Turneps, *&c.*—— Turneps will alſo feed Cows for producing Milk, when cut ſmall, and given in a Trough, or Manger, as they do in *London*, and many other Parts, with Hay. —— In this Month, or laſt, the *Norfolk*, or *Suffolk* Farmers, draw Turneps for Hoarding: They cut off their Leaves, and pile the Roots, or Turneps, up in Barns, ſomewhat after the Manner the Brick-maker does his unburnt Bricks Abroad; ſo that the Air may have Room to come in between them, while they lie in this hollow Poſture. Thus they may be kept a great while from being rotted by the Froſt, and given to Runts under Cover; and accordingly theſe *Suffolk* and *Norfolk* Farmers feed their horned Beaſts with Turneps in a Trough and Manger in the Winter-ſeaſon; for, by this Means, they keep whole Bays of Barning full of Turneps.

How Ewes are fed on Turneps, that ſuckle Houſe-Lambs. —— In *Middleſex*, they ſow their Turnep-ſeed, and harrow it on their four Bout-lands,

to

to keep the Wets from rotting them; and, when they have a Mind to feed their Milch-Ewes with them, they draw them, and lay them on their Meadow-ground, that the Beaſts may eat them in the drieſt Manner; but this impoveriſhes their Plowed-Grounds very much, and would ſpoil it for Corn, had not theſe Farmers a great Opportunity of bringing the beſt of Dreſſing by the Back-carriage of their Hay-carts from *London*.

Why they dare not ſow Turneps in moſt Parts of the Vale of Aylisbury. —— One great Farmer, of my Acquaintance, did ſow ſome of his Ridge-lands with Turnep-ſeed, and had a good Crop in Return, which he was obliged to draw, to feed his Sheep with them on his Meadow-ground; but this ſpoiled his Barley-crop; becauſe, where he drawed his Turneps, the Water lodged in the Holes, ſoured his Ground, and made it ſo unfit for Barley-ſeed, that he had but a trifling Crop in Return.

Why Turneps, that are to be fed, will not bear Tranſplanting. —— It is by Experience found to be true, that, if a young Turnep, before or after Houghing, be tranſplanted, it will not apple, but run its Root into little forked Parts: Nor will they, at any Time, increaſe in their Bulk after Tranſplanting ———— but will only keep alive. Therefore a Turnep will not bear Tranſplanting, unleſs it be for Seed.

How young Store-ſheep may be improved by the Feed of Turneps. —— This is, and may be, juſtly called a good Piece of Husbandry, to buy in Tegſheep at — *Allhollantide*, when they are about a Year and a Half old, and have two broad Teeth, to put them into Turneps, and feed them like fattening Sheep; which will not only keep them from being ſtinted in their Growth, but cauſe them to ſhoot into a large one. And, when they have been

been kept on as Store-ſheep two Summers, they will have four broad Teeth; and then they are juſt right for the Farmer's fattening them on his Turneps, or for ſelling them as Weathers fit for fattening on Turneps, at about ten or twelve Shillings a Piece.

Why Turneps ought not to be fed too ſoon. —— Do not feed your Turneps too ſoon, without great Neceſſity; for, if you do, and the Land is thus forced to lie ſtill a conſiderable Time, before you ſow it with Barley, the Conſequence is likely to be, that this Dreſſing of the Sheep will be waſhed away, the Ground plow heavy and clung, the Treddles be buried, and then you cannot plow the Ground thin enough for Barley; for, unleſs you can plow it thin enough, Sowing Barley, on one Plowing, will be to little Purpoſe; becauſe then the Corn will have but little Benefit of ſuch Sheep dreſſing the Ground.

CHAP. VIII.

Of CARROTS.

OF Preſerving Carrots *for Winter and Spring Uſes.* —— The longer a Carrot remains in its original Bed of Earth, the harder it grows, and the more unfit for the Table; but, for Feeding Cattle with them, there does not require ſuch Exactneſs of Time: However, whether Carrots are ſowed for the Table, or for Fattening Beaſts, it is commonly practiſed to draw them before, and about *Michaelmas*, for Boarding. The Gardeners, who live about *Leighton* and *Brickill*, in *Bedfordſhire*, take this Method, to preſerve their Winter Carrots; —— They make a Trench in their ſandy, loamy Ground, three Feet deep, ſix Inches wide

at

at Bottom, and eighteen at Top, in what Length of the Earth is neceſſary; when the Trench is full enough, they cover with Mould, and leave a Ridge of the ſame over all the Carrots; and thus they keep the Carrots ſound almoſt to *Midſummer*. Not but that there are other Seaſons for drawing Carrots for the Table, becauſe ſome Gardeners ſow the Seed at ſeveral Times, in order to enjoy young Crops of them accordingly; but theſe Niceties are out of my Road, as I am here engaged in writing on Carrots for the Uſe of Cattle; and therefore I ſhall proceed on that Account, as follows: But firſt I ſhould have obſerved, that others preſerve their Carrots in a Cellar, or other Place, by laying a Row of them on Sand; and, when they are covered with Sand, they lay another Row, and ſo on.

How a Perſon made ſixty Pounds of one Acre of Carrots, and how beneficial theſe Roots may be employed to a Farmer's Profit. —— Carrots are well known to be one of the ſweeteſt and moſt nouriſhing Roots that grows: And, as their common Sowing-Seaſon is in *February*, they ſeldom grow larger than they are after *Auguſt*; and therefore at fartheſt ſhould be drawn and hoarded, as I ſaid, by *Michaelmas* —— and may be made Uſe of in this Month, for Feeding and Fattening of Oxen, Horſes, Sheep, Swine, Rabbits, *&c.* under Cover, to the greateſt Advantage. A Perſon of Note, in *Glouceſterſhire*, ſaid he could fatten an Ox with Carrots as much in one Week, as common Meat would do in four. Another made ſixty-odd Pounds of all his Carrots that grew on only one Acre of Ground, by ſelling thoſe that grew in one ſquare Pole, at the Price of eight Shillings, and ſo for every Pole throughout the Acre. But what I am going to write will ſeem a greater Wonder ſtill, and that is, In *September* laſt 1742, an honourable Perſon told me, that Mr. *Biſhop*, of *Cirenceſter*, made ſeveral hundred

hundred Pounds (he ſaid five hundred) of Cabbage-plants, and yet ſowed the Seed of them in *February*, after the great froſty Winter of 1740, which killed moſt of the green Ware throughout the Kingdom; but he preſerved theſe, by having a very rich Soil, the beſt of Shelter, and a ſuperior Skill. I have ſeen a Jockey throw a whole Bunch of Carrots at a Time into a Manger, for Fattening a Horſe; and a ſufficient Quantity of theſe Roots will do it very ſuddenly. A Gentleman, in 1742, ſowed the Seed of Carrots all over one or more of his Ridge Vale-lands, in order to get a Crop of them, for feeding and fattening the great Numbers of Swine that he keeps; and therefore, for the foregoing Reaſons, whoever can get a good Crop of Carrots, may aſſuredly make a very great Profit, not only by fattening Swine, but alſo for Feeding Breeding and Milch Sows with them; for theſe Roots will nouriſh much, and breed a great deal of Milk at the ſame Time in both Sows and Cows. And, as it now is a War-time, it may be depended on that Hogs will ſell well; and, therefore, in this Month prepare your Ground for ſowing Carrots in *February*, by trenching in Dung, and laying the Land up in narrow Ridges with the Spade in a Garden; but, if, in a Field, you deſign to ſow Carrots, then plow in Dung in this Month, according to the Nature of your Soil, and it will hollow, and help to ſweeten it; for this Root requires a deep and dry Soil, *&c.* But of *Carrots* I intend to give a very particular Account, when I write of their *Sowing* in *February*; for this Vegetable deſerves a nice Management; and, I do aſſure you, there is a nice Management belonging to the right Ordering of the Ground for it, and the Sowing of the Seed afterwards.

CHAP. IX.

Of Beech-Maſte, Acorns, *and* Hogs.

HOW profitable Beech-Maſte is to Farmers in fattening their Swine.—— The Beginning of *October*, we turn out our Swine to feed on Beech-maſte; for about *Gaddeſden* we have great Numbers of theſe Trees growing on Commons, in our Woods, and in our Hedges. Under theſe Trees, the Hogs generally get Pork in a Maſte-Year, which ſeldom fails of being a plentiful one, once in three Years, or ſooner. And it is no Wonder, that Hogs thrive ſo well on this Feed, for it is certainly a moſt oily, ſweet, nouriſhing Food, which tempts theſe Creatures to turn, as it were, wild, and ſtay from Home a Month, or more, together in Queſt of this delicious Fare; eſpecially the black Foreign Sort of Hogs, who will fat much ſooner on it, than our *Engliſh* Breed, and become much finer Pork, either for Eating freſh or Pickling. They are therefore of late preferred by moſt of our Nobility, and are very profitable, where they have a Range, becauſe they will live almoſt upon Graſs and Maſte; nay, I may ſay quite. In a certain Park in *Kent*, its Owner let many of theſe hardy, wild Sort of Swine run with his Deer, and they improved greatly by it; and, when they have got half Meat, they may be fatted on Pollard, or on Barley-meal, or Oatmeal, or on Peaſe, or on Beans, in one Month, or ſix Weeks Time at furtheſt; ſo that, by keeping this Breed, the Charge of Meat is much ſaved, and the Fleſh much better than the *Engliſh* Hog. The Sow will alſo fat her Pigs ſooner and better than the *Engliſh* Sort, by Selling for a larger Price than them, if their Colour is white, as many be. I have known Pigs, of a Foreign Sow, ſell for

Two Shillings and Six-pence a Piece, when the *Engliſh*, of the ſame Age, fetched no more than Eighteen-pence, more for their Fatneſs than their Bigneſs. But there is a Difference in the Foreign Breed of Hogs, according to the Place they come from. At *Gaddeſden*, we have a ſmall *China* Breed, which I can furniſh any Gentleman with, that thinks fit to be at the Charge of their Carriage from hence. Maſte does Hogs moſt Good, when it is ripe, as it is in this Month, and laſts till *Chriſtmas*, and after; and is ſo much valued at *Gaddeſden*, that our Copyhold-Court, by our Preſentments at it, prohibits the Gathering the very Hulls of this Beech-maſte, before *Lady-Day*, leſt, in Sweeping up theſe for Fuel, the Women ſweep up the Kernels with them.—Sheep and Deer will eat Beech-maſte like a Hog. Turkies and Hens will alſo fatten on them very ſuddenly.

Of the Acorn, its Properties, in feeding Hogs.—This is the Maſte of the Oak, and does great Service where it is plenty in feeding of Swine, as they drop from Trees. The Acorn is cotemporary with the Beech-maſte, both being in great Perfection in *October*, and in this Month. But, to this great Conveniency, there is an Inconveniency tacked; for theſe Maſte, as they are commonly baſhed down by Poles on Purpoſe, for the Hogs feeding early on them, their Unripeneſs, or Greenneſs, very often breeds the Garget in Swine; for theſe, in this Condition eſpecially, are a great Stiptic, and poiſon the Blood of theſe Creatures, by ſtopping, I ſuppoſe, its Circulation, from whence an Inflammation, or Swelling, enſues and is bred, that kills ſometimes, if not cured, and is contagious. I have known great Numbers of Swine loſt by the Garget, and therefore ſhall write the following Receipts,

To prevent a Hog's Gargeting, by the Feed of Beech-Maſte, or Acorns.——Some put Briony-Root into the Waſh-Tub, and let it continue therein.

A ſecond Receipt for it. —Others put Turmeric and ſweet Fennel-ſeed into a Waſh-Tub, and it will anſwer the ſame End.

A third Receipt—Is reckoned a very good one; and that is, to put as much Powder of common Antimony into their Meat three Times a Week, as will lie on Half a Crown; I mean the Peaſe, or Beans, or other Meat that is given to Hogs, ſhould have a little Water ſprinkled over them firſt, and then the Antimony ſhould be ſtrewed over it.

A fourth Way.——It is the Practice of many to gather Acorns in a very plentiful Year of them, for hoarding them up againſt a neceſſitous Time, for feeding their Hogs at Home, when the Acorns are eat up Abroad. In this Caſe, we are obliged to cure the Acorns of their auſtere Rawneſs, before we give them to the Hogs, or elſe, they ſeldom fail of breeding the Garget in them. To do this, we put a Buſhel of them at a Time in a Tub, or Hole in the Ground, and pour Piſs on them to make them ſpire, which, if they lie a Fortnight, they will do almoſt a Finger's Length; then, at the Fortnight's end, ſpread them thin, and begin to give them a few at a Time, to each Hog, three Times a Day, but don't confine him; for, if you do confine the Hog in a Stye, under this Feed, he will never be fat: Therefore, we let him have his Liberty. After one of our Labouring-men had given, in this Manner, fourteen Buſhels of Acorns to his Hog, he was fat to a Wonder, weighing twenty-ſeven Stone, and always ſuffered him to walk Abroad, with the additional Food of ſome Waſh, and a few Grains. Others will lay ſeveral Buſhels of Acorns in one Heap, and pour Piſs on them, and, as the Heap is large, the Acorns will heat the ſooner; ſo that, in

four or five Days, they will be fit to give Hogs; and, when the Acorns are thus cured by Piſs, they will never garget a Hog.

A further Account of Beech-Maſte.— Or take the Account of Maſte, or Seed, in this Manner: This moſt ſerviceable Vegetable grows in vaſt Quantities in *Hertfordſhire*, and eſpecially about *Gaddeſden*, by Means of the great Numbers of Beech-Trees, that ſpontaneouſly grow, from the Nut, or Maſte, by their Fall from the Trees, or by being brought and left by Fowls, or Mice, or Squirrels; ſo that there are but few of our Hedges, but what have ſome of theſe Beechen-Trees growing in them, which, with the many Woods we abound with, furniſhes us, commonly, once in three Years, and ſometimes in a ſecond Year, with vaſt Quantities of this triangular Fruit, or Maſte, inſomuch, that Swine, in ſome plentiful Years, will wholly live upon it; and, if ſevere Froſts and Winds keep off, it continues falling till *Chriſtmas*, and fats Hogs to that Degree, that many kill them directly from the Maſte; and thus is a Winter Subſiſtence, in a great Meaſure, for both Swine and Deer, even to *Lady-Day*; and, in a particular Manner, is the Poor-man's great Friend, becauſe it fats him a Pig or two, and, with ſome Help, a larger Hog, for pickled Pork, or Bacon, which keeps him from the Butcher's Shop, great Part, if not all the Year. The Farmer alſo, and his Family, is cheaply maintained by his Hogs fatted with theſe Maſtes: For pickled Pork, and Bacon, is the main Diet of our Families, throughout the Year: And our fatted Swine not only do this, but alſo help us to pay our Rents, by the Sale of ſome of them every Maſte-Seaſon. But, for making them the cleaner Meat, our general Way is to give a thirty Stone Hog five Buſhels of Peaſe, after they are taken from the Maſte, before we kill him, and more to a bigger; as well to clear him of

of the oily Nature of the Beech-maſte, as to fat him for thick Pork, or Bacon. If the Maſte is ſo near that the Swine comes Home every Night, we commonly give them a Supper of Waſh, or other Food, but nothing in a Morning.

Why Beech-Maſte is of great Service in Fatting all Sorts of young and old Swine, except a Sow with Pig.— Experience has often proved it, that, if a Sow with Pig is kept on Beech-maſte, for any conſiderable Time, after ſhe is half gone with Pig, it will cauſe the Pigs to be hairleſs, and ſo ſmall and puny, that they will be hardly worth Rearing. This, I conceive, is owing to the ſulphureous Quality of the Oil in the Beech-kernel, which ſo heats the Pigs in the Belly of the Sow, as to cauſe the Misfortune: For this Reaſon, ſeveral obſerve to keep ſuch Sows from the Maſte, after they are gone two Months with Pig; for, after that Time, the Damage breeds and increaſes, if the Sow is fed on the ſame.

CHAP. X.

Of Stubbles.

OF Wheat-Haulm, or Stubble, &c.——Wheat-haulm, or Stubble, is the chief Fuel of the Vale of *Aylesbury*, where there is little other Sort to be had, which neceſſitates the poor People to lay in a Winter-Stock of this. And ſo careful are they to obtain a Sufficiency of this, that there is hardly a Day-labourer, but what makes a Bargain, on his being engaged as a Month's-man, or, as we call it, *a Harveſt-man*, to have Leave in *September*, or *October*, or in this Month, *to mow and bag up*, as the Term is, ſo many half Acre-lands of Haulm, or Stubble, for his Firing; and alſo, that his Maſter, the Farmer, with his Team bring it Home

to

to his Houſe. Now, the Cutting ſuch Haulm, of Stubble, is not only of great Service to the poor Labouring-man, but alſo to the Farmer, on this Account: If the Stubble was to remain uncut on the Ground till Bean-Seaſon, and then plowed in, it would cauſe the Horſe-bean Seed, to lie hollow, and not have that Benefit of the Earth, which is neceſſary to nouriſh and bring forward a timely large Crop of them; for, in this Caſe, it would give the Sun and Air ſo much Room, as to enter the Earth, dry the Bean-roots, and cripple the Bean-crop.— About *Higham*, in *Kent*, they make uſe of a Sort of Harrow drawn on Wheels, for the Purpoſe of taking off their Stubble, by having their Harrow-tines turned up like Cats-claws; but this is chiefly uſed for their Peaſe-haulm. — In Vales, the Farmers, and others, have generally done Mowing and getting in their Wheat-haulm by *Allhallantide*; which is not only common Firing in many Parts of theſe barren Countries of Wood, but uſed alſo for drying Malt; and, when left high on the Ground, it is often made to thatch Houſes and Hovels with, and to litter Horſes, Cows, and other Cattle, for increaſing Dunghills, and is much better uſed ſo, than to plow it into the Ground; for, in low, wet Vale-grounds, if it is plowed in, it is (as I ſaid) apt to make their Earth too light, and cauſe their Beans to fall down, the Stubble to hang about the Share-point, drive up in Heaps, and become a Lodgement and Neſts for Slugs, and other Inſects.

CHAP.

CHAP. XI.

Of Sheep.

THE Benefit of Keeping Welch *Sheep.*—Several in the Vale of *Aylesbury*, and in other Parts, buy in ſmall *Welch* Sheep in laſt, or about the Beginning of this Month, which they meet with on the *Dunſtable* Road, in their Way to Fairs in the *Southern* Parts; and this they do, becauſe ſuch ſmall Sheep are of a very low Price, even four or five Shillings a-piece, and will carry Dung to the Fold as well as a bigger; and, if a Rot ſhould happen, theſe will fat ſooner than a bigger Sheep, and, if they have Meat enough, they will fetch their prime Coſt, tho' the Rot has begun in them; which to know, ſee my former Monthly Works, wherein I have ſhewn the ſeveral Signs to know ſuch diſtempered Sheep by. But others object againſt theſe, and refuſe them for a bigger Sort, becauſe they think theſe will not take a Rot ſo ſoon, as a leſſer one.

To know the Value of a Sheep by weighing it whole.—A Sheep, but no other Beaſt, will weigh double its Carcaſe, when put into a Scale alive, by which a near Gueſs may be made of its Value. But this Method will not anſwer as to Bullocks, or Calves, becauſe the Skin of theſe is ſometimes worth Twopence Halfpenny a Pound.

Foddering Sheep.——In this Month it ſometimes happens, that we are obliged to fodder our Cattle with Hay, or Straw. For Sheep, our Racks are made ſixteen Feet long; three or four of which will ſerve a hundred, or more Weather-Sheep. Pea-ſtraw, of any Kind, is very agreeable to them. Next to this, Wheat-ſtraw deſerves the Character of a very hearty Fodder, eſpecially for its valuable Ears,

Ears, which the Sheep love to pick out, and delight in feeding on them. Barley-ſtraw is often given to Sheep in Racks, but they will not eat it ſo well as Pea-ſtraw, becauſe, the Ails that are left in the Ear, prick their Mouths. Barley-ſtraw is a faint Straw at beſt, tho' not quite ſo heartleſs as Oat-ſtraw; but Thetch and Bean-ſtraw, if they are inned dry and well, are excellent Fodder. Begin, therefore, in this Month to give your Sheep good Straw, and it will keep your Weathers in good Heart all the Winter; otherwiſe the flaſhy Graſs will be apt to bring on them the Red or White-water, and Rot; for this Reaſon I have given my Sheep Pea, and other Straw, till *May-Day*, to dry up that Moiſture in their Bodies in the Night-time, which they contract in the Day-time, by feeding on the watery, crude, unwholeſome Graſs; and which alſo cures the ill Effects of the Dirt and Naſtineſs that they lick up in the Winter, and Spring, by their cloſe Biting after the ſhort Graſs.— The Price of Wintering Store-ſheep is Three Shillings a Head, and Two Shillings and Six-pence for a Lamb, from *Allhollantide* to *Lady-Day*. Some ſeparate their Ewes from their Weathers, at *Allhollantide*, and feed the firſt with Hay, or at a Pea-ſtack, and the latter with Straw.

How a Miller fatted Six Weather-Sheep on a Rood of Ground.—This was done by Mr. *Marlin*, a Miller, near *Barkhamſtead* in *Hertfordſhire*, on only one Rood of Meadow-ground, with the Help of Horſe-beans and long Bran mixed together, and Hay given them in a Rack, juſt by a River-ſide, where they might drink when they would. The Sheep coſt thirteen Shillings a Piece in, and, in nine Weeks time, he ſold them for two and twenty Shillings a Piece. Others, inſtead of Beans, make Uſe of Oats and Bran.

Of

Of Pole-Sheep.——The Pole, or Hornleſs Sheep, are, for the moſt Part, kept in *Oxfordſhire*, *Lieceſterſhire*, and *Lincolnſhire*, and ſome other Places, as being the largeſt Sort, and proneſt to fat with the leaſt Meat, becauſe the Nouriſhment, that is employed in the Growth of others Horns, is here ſaved; ſo that the Body, or Carcaſs of a Pole-Sheep, will fatten the faſter with the ſame Meat that a horned Sheep eats. But there is this Inconveniency attending the keeping Pole-Sheep in incloſed Fields: As they have no Horns, when they arrive at the Age of four or five Years old, there is hardly any ſuch thing as keeping them in an incloſed Field, without the conſtant Attendance and Watching of a Shepherd, becauſe they will run their Head into a Hedge, and, if the Place is weak, they will force a Paſſage through it, in Queſt of better Living, than they enjoy at preſent; and thus, likewiſe, they will ſtraggle away, by leaping over Stiles and Hurdles: Inſomuch that we are ſometimes forced to couple the oldeſt and ſubtleſt of them like Hounds, or yoak each other, by a Stick hung croſs-wiſe to a Leather-Collar, hanging under their Throat, near a Yard long. Or *Side-ſpan* them, as we call it, by tying a fore Leg to a hind Leg, with an Allowance for Length of String. Or, when one of theſe Pole-Sheep is apt to ſtray from off a Common, we generally couple it to an old, ſtaunch, ſtrong Sheep, that will not leave the Flock.—Hence it is, that the Misfortune ariſes, of their Caſting their Lambs; for, as the Pole-Ewe ſtrains to get through a Hedge, it ſometimes cauſes the Loſs of their Lambs. However, this may be ſaid of them, that they are rare Foragers, for, if they are kept ſhort of Meat, having no Horns to hinder, they will make their Way (if poſſible) into better Feed. At this Time, I have but a few of them left; them I will get rid of, as ſoon

as I can: For, in ſhort, the Pole Breed are not fit to be kept, but where a Shepherd conſtantly attends them.

CHAP. XII.

Of the Management of Lambs, *kept for* Store-Sheep.

HOW two Farmers bought in Lambs *to make* Store-Sheep *of them, and how one loſt them, while the other preſerved them.*—The Management of Lambs, that are bought in, or bred to make Store-Sheep of, is of conſiderable Importance: Therefore, I ſhall here write of two Caſes that happened to two of my next Neighbours, relating thereto.——One of them bought in forty *Weſtern* Lambs, at about five Pounds a Score, with a Deſign to, winter them; and accordingly fed them in his Plowed-grounds and Meadows, till a deep Snow fell, which totally deprived them of any Graſs. This obliged the Owner to carry them ſome Hay, that he diſperſed under the Hedges, which they eat, and did very well throughout the Winter. But the other, that bought in the ſame Number, had not ſuch Succeſs; for, when Snows fell, and lay ſhallow, this Man carried them Hay in like Manner, as the other did; but they would not eat it, becauſe they had Room enough by their Pawing, to come at a little Graſs, which made them refuſe the Hay; and thus they went on, till moſt of them died by Hunger. This occaſioned him, afterwards, to alter his Management; and, in ſucceeding Years, upon the Fall of Snow, he would bring his Store-Lambs into his Yard, and learn them to eat Hay, after one of the Methods I am going to relate.

How to learn Store-Lambs *to eat Hay, whereby many of their Lives may be preſerved.*—— Some Farmers, when they put their Lambs to Hay, will twiſt a little of it together, and draw it croſs their Grinders, and then let them mumble it.

A ſecond Way.— Others will learn Lambs to eat Hay, by putting a little, at the End of a Stick, deep into their Mouths; and ſometimes they will, by one, or both theſe Methods, eat it like an old Sheep in four and twenty Hours, and then they may be fed with Hay in Fields, or otherwiſe.

A third Way.——Others will put half a Dozen, or more, of old Sheep among the Lambs, to learn them at firſt to eat Hay. But this Sort of Trouble is over, when they are two Years old, for then they will eat Hay faſt enough, and, perhaps, Straw.

How a Farmer made about forty Pounds a Year by fatting Lambs.——This Man lived near *Weſt-Hyde*, not far off *Rickmanſworth*, and commonly bought a hundred *Dorſetſhire* Ewes in, about *Allhollantide*, that were full-mouthed, at fifteen Pounds a Score, near Lambing, which he lambed; and, after he had fed both Ewes and Lambs on Turneps, or Cole, or on Graſs, by *Eaſter* he ſold the Lambs fat; and, in about ſix Weeks time, he fatted and ſold the Ewes; the Lambs for about ten Shillings a Piece, and the Ewes for their prime Coſt. By which he reckoned he got forty Pounds a Year, and thought it turned to a better Account, than Suckling Houſe-lambs, which, before this, was his common Practice. As to the Buſineſs of Suckling Houſe-lambs, I have given the largeſt Account of it, of any Author beſides; as you may ſee in my Monthly Book for *June*, at Page 109. *Of Folding Sheep.*—In this Month, many fold their Sheep on new-ſown Wheat, to great Advantage, where the Ground lies dry. All this Month I folded on my Wheat, 1742. A Rack of Hay, or Pea-ſtraw, here,

is perfectly neceſſary to be fed in the Fold every Night, to keep the Sheep in Heart, and do the Ground the more Good. Some put this Fodder looſe on the Ground, for Want of a Rack.

CHAP XIII.

Of Knitting Rams.

Of Knitting Rams. —— By this Time, the Ramming Seaſon is over; and therefore ſome are of Opinion, that it is the beſt Time to knit Rams. Others ſay, at the Spring it is beſt done. There are two Ways of gelding Rams: One is done by claſping the Cod with Irons, and ſearing it afterwards, by common Gelders or Cutters. The other is performed by the Farmer himſelf, thus: He gets a large well-waxed Shoemaker's End, and faſtens each End of it to a Stick, about ſix Inches long; then he puts it in a ſingle common Knot over and above the Cod, and then, with one of the Sticks in each Hand, he draws it up with all his Might; and, as the Thread is waxed, it will hold and not ſlip from the gathered Knot; ſo that the Lamb inſtantly loſes all Feeling of the Cod, which becomes deadened, by ſtopping all Circulation of Blood; and, if it is let to remain in this Poſture, the Cod will rot off. But one of my Neighbours proved it a wrong Way to let the Cod remain on ſo long as to rot off, for by this he loſt a Ram; becauſe, in the Time of rotting, the Cod ſtank to that Degree, as killed the Sheep. The right Way therefore is, to cut off the Cod, at a Fortnight's End at fartheſt, about an Inch below the String or waxed End, to prevent its Slipping off; for, if that comes off, there will be a Hole big enough for a Boy to put his Hand in, and then it is a Chance but the Beaſt dies,—

dies. —— It is beſt Knitting Rams in this Month, as I ſaid, or at the Spring; becauſe, if it is performed in Summer, the Flie is apt to take the Part. And, in Ramming-time, it will be worſe ſtill. Whenever this Work is to be done, the Sheep ſhould enjoy a full Feed, that he may be in Heart to undergo the Operation. One of my Neighbours having had a Ram knit, the Man did not draw the waxed End, or String, tight enough; which preſently bred an Inflammation, and ſo ſwelled the Part, that the Ram was in great Danger of dying. Upon this the Owner cut the Cod off, and there iſſued out ſome corrupted Blood, and he was afraid the Beaſt would have bled to Death; but, as it happened, the Blood congealed, and ſtopped the Bleeding; for it often happens, that Blood ſtops Blood, and the Sheep did well. Knitting, by ſome, is thought the beſt Way of Gelding. Others are of Opinion, that Claſping is the beſt. Knitting ſafely very much depends on the Strength of the Operator: Accordingly, I always take care to make Uſe of a Man that is ſtrong in his Arms for this Purpoſe, and I have had good Succeſs.

CHAP. XIV.

Of the Management of Farmers Horſes.

THE excellent healthful Method that three Farmers take to feed their Plough and Cart Horſes Abroad. —— Now moſt of our *Chilturn* Farmers take their Horſes into the Stable, becauſe the Seaſon is cold, and Graſs commonly ſhort, and keep them altogether in the ſame. Others refuſe to take them in the Stable at *Allhollantide* (which is the general Time) or any other Time in this Month, if the Horſes can endure the Weather Abroad, on Purpoſe to keep them in Health, and

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ſave Stable-Meat. Others will keep them in the Stable every Night, and turn them out in the Day-Time for a Week, two, or three, if the Weather is mild, as aforeſaid. But the three Farmers I am going to mention, I think, acted the beſt Œconomiſts of any I ever knew. Their Method was this: They had open Hovels in their Farm-Yards, erected in the Faſhion of a long Square, which expoſes three Parts of them to the Air; but the fourth Part, before their Heads, is cloſed with Boards, and a Manger faſtened to them. Theſe Hovels being covered with Straw, Faggots, Furz, Broom, or Fern, or ſuch like cheap Stuff, their Horſes were let looſe all the Winter, to range, at Pleaſure, about the Farm-Yard, and thus at Liberty to chuſe, or refuſe, their Straw, or Hay, at Pleaſure. And when Oats, or other Corn, or Chaff, or Grains, are to be given them, the Manger is always ready for the Horſes eating their Meat in a dry Condition. —— This excellent Management keeps the Horſes from catching Cold, — prevents foundered Feet, keeps their Heels from ſwelling, gives them a long Wind, creates an Appetite, and preſerves them in Health. Thus three ſeveral Farmers, who lived very near together, ordered their Horſes, and had the beſt Succeſs from this Sort of Management of all others; for it is certain, that the cloſe Confinement of Horſes, in a Stable, is a Sort of Priſon to them, and is accordingly thought ſo, by ſeveral of the greateſt Farmers living between St. *Albans* and the Town of *Hertford*, who ſtrictly obſerve to keep their Horſes out in Winter, in a Yard, on Purpoſe to go in or out at Pleaſure of a Hovel, or Half-houſe, under which, they are well-littered, and the ſame in the Yard, for the making more Dung. This Method is the moſt likely to prevent, or cure, the Greaſe, or Scratches, in Horſes, with a little outward

ward Aſſiſtance, eſpecially, if they have Room enough allowed them; for then they will enjoy an Exerciſe, which will become a Sort of Remedy, to promote the Circulation of the Juices. Yet, I am ſenſible, that ſome Farmers will make an Objection to this, and ſay, they will, by letting Horſes range at great Liberty, loſe their Dung. But this I deny, where Horſes are confined in no greater Room than a large Yard; for here one Load of Straw will nearly make ten Loads of Dung. Indeed, where Horſes are confined in an intire Field of Graſs, then I muſt needs ſay, their Plea is good. However, the Loſs of ſuch their Dung may be well compenſated, even here, if ſuch Horſes are troubled with Scratches, or greaſy Heels, and are ſuffered to range all the Winter among a plentiful Bite of Graſs, Weeds, Ruſhes, or ſuch like; becauſe the Dews and Wets, which reſt upon them, will, by falling on the Horſes Legs, ſo cool and eaſe the Inflammation and Heat, that I have known a Horſe cured of extraordinary foul Heels, by this Way of keeping him, without any other Application; and yet he worked in the Day-time, as uſual. —— A neighbouring Farmer to me bought a goodly Horſe, in Appearance, at, I think, about ten Pounds Price; and, notwithſtanding his Youth, the Greaſe fell into his Heels, in ſuch Plenty, that, while he ſtood in the Stable, the Humour and Swelling increaſed, inſomuch that he was reſolved to ſell him, as ſoon as he could; and to fit him for Sale, he turned him and another into an Orchard, where he fed them all the Winter, and at St. *Paul*'s Fair, held at *Leighton*, in *Bedfordſhire*, he ſold him, I think, for eleven Pounds, on the 25th Day of *January*, 1741. This leads me obſerve, what Dr. *Bracken* ſays of this Diſtemper, at Page 171, in his ſecond Volume, on account of a Saddle-Horſe.

Dr.

Dr. Bracken's *Directions to a Groom, for preventing Scratches, or Greaſe, in a Horſe.* —— A Groom, ſays he, ſhould never rub a Horſe's Legs, but he ſhould feel with his Fingers, whether the Horſe's Heels be clear of Scabs, *&c.* for Lazineſs and Slothfulneſs are the Cauſe of moſt cutaneous Diſtempers. In fine (ſays he) I am of Opinion, I can cure the Scratches, or Greaſe, without giving an Ounce of Phyſic inwardly; and this by turning the Horſe out at proper Times, even in Winter-weather, provided he is well covered all over, excepting the Legs. So, pray, what Occaſion is there for Purge upon Purge, till the Horſe is nearly purged out of his Life for the Cure of the Greaſe; ſeeing a little good Management, without any inward Medicine, will effect it ſafely? Therefore, Reader, take Notice of this wholſome Precept, *viz.* If ever your Horſe is greaſed, or has the Scratches in the Stable, it is for Want of a large Stall, or elſe for Want of Judgment and the Application of it in your Groom. And altho' I own there are ſome gummy-legged Horſes very apt to the Greaſe and Scratches; yet ſtill, in my Thoughts, theſe Diſtempers may be prevented, provided the Groom be not lazy, and fonder of his Bottle than he ought to be. Sometimes it happens, that the Scratches are ſo very painful to a Horſe, that they cauſe great Heat and Inflammation about the Fetlock-joint, and a little higher. In this Caſe, indeed, the Groom may rub the Legs too much, and make the Inflammation increaſe; therefore moderate Rubbing, warm Waſhing, proper Ointment, and a large Stall, with clean Bedding, and a great deal of it, are moſt likely to effect a Cure, when the Inclemency of the Weather forbids turning the Horſe out in the Day-time. —— The Ointments are as follow, *viz.*

An Ointment to cure the Scratches in a Horſe. —— The common white Ointment, ſays he, of the Shops is a good Thing to cool and eaſe the Scratches; and the Method of uſing it is, to rub it on with one's Finger, when the Heels are waſhed clean, and wiped dry.

A Second. —— If the Scratches are dry, it is beſt to keep the Heels ſoftened and ſupple, with Curriers Dribbling, made of Oil and Tallow; for this will keep the Hide from cracking, and preſerve it as well as it does Leather; and it is the only Thing to hinder Scratches, by uſing it often before Exerciſe, and waſhing the Heels with warm Water, when the Horſe comes in. This will prevent ſo painful a Diſorder, that the Scratches often occaſion, as to cauſe a Horſe to loſe his Appetite, and go exceeding lame and ſtiff, for ſome Time after ſetting out.

Of feeding Cart and Plough-Horſes in a Stable, before and after Plowing, or Carting. —— In Winter our Horſe-keepers get up at five o'Clock, and in Summer at four, to bait their Plough, or Cart-Horſes in the following Manner: Firſt, Some mix ſplit Beans, Bran, Oats, and Chaff together, and give it a little at Time; and, while they are eating, the Horſe-keeper curries and dreſſes the Horſes. Secondly, others give only Oats, Bran, and Chaff, becauſe, Long-Bran being ſomewhat of a chaffy Nature, but ſweeter and heartier, it will cauſe the Horſes to lick up the Chaff the better; for, if they were to be fed with only Peaſe, or ſlit Beans, or with Oats among Chaff alone, the Cattle would daintily toſs the Chaff up at the End of the Manger, blow on it, and not eat their Meat near ſo well, as when Bran is mixed with it. Thirdly, I know a great Farmer that always makes Uſe of Bran throughout the Year, becauſe he thinks it ſaves Corn, and makes the Meat the more agree-

able. Fourthly, Some give half a Peck of Oats to each Horſe, for a Bait in a Morning, before he goes to Plough or Cart, and the like in the Afternoon; others give more. Some bait their Horſes all the Afternoon, till they can eat no more Manger-Meat. Others take this Method, to make them feed the better: After they have baited a little while in the Afternoon, they give them a little Hay, and then water them, which will cauſe them to eat their Meat with a good Appetite; and the better, by giving them it at an Ipſen at a Time, of Oats with ſifted Chaff, *&c.* And thus a right Horſe-keeper will make above twenty or thirty ſeveral Servings of one Peck of Oats, and other Meat with it, in one Day, to each Horſe; and at Night, after they have been taken from Graſs, to live altogether in the Stable, till *Chriſtmas*; and then does the ſame with Pea, or Bean-ſtraw, till *Lent* Seed-time, when he begins to give them Hay; which leads me to obſerve, how abſurd and ſilly ſome Farmers are, to ſpoil and kill their Cattle, for Want of ſufficient Food, and good Management.

How a Farmer ſpoiled a young Horſe, for Want of Food enough, and good Management. —— The Farmer, I am now writing of, I know very well, who, keeping but two Horſes, bought one of them, I think, for five or ſix Pounds, at about ſix Years old, in a good Condition, as to his Fleſh; but, before he had him quite twelve Months, he fell away to that Degree, for Want of Meat enough, and good Looking after, that they were forced to lift him up by the Tail, to make him ſtand to feed. However, a Miller, finding the Horſe had Youth on his Side, bought him; and, in leſs than a Year's Time, the Horſe throve to that Degree, by his full and good Keeping, that he was worth ten Pounds, being fourteen Hands and a Half high,

and

and proved as bold a Horſe, for the Saddle, as moſt that travelled from *Hempſtead* to *London* with a Miller on his Back, for here many uſe the Trade of ſupplying *London* with Flour.

How a Farmer ſtarved his Cow, and thought it occaſioned by Witch-Craft. —— At *Bogden*, near *Huntingdon*, lived one *S—n L—n*, an old Penny-Father, that would not allow his Cattle Meat enough; for Want of which they ſometimes died, and then he thought them inchanted, or bewitched: This old Fellow had a Cow, that had been kept ſhort; and was ſo very poor, that ſhe could not riſe, when laid down, and he ſaid ſhe was bewitched; ſo, to diſenchant her, he takes a long Stone-bottle, and puts ſome of the Cow's Stale into it, and corked it up very cloſe, and made a great Fire, and ſet the Bottle upon it, and blowed the Fire very fiercely, and expected the Enchantreſs to come, yet none appeared. At laſt, the Bottle flew in Pieces with the Heat, and gave a Report bigger than a Muſquet, and cut the Witch-finder's Noſe half off, and mortified his Face to that Degree, that he looks very frightful. After his Conjuration, he lay for dead after he had received the Shots, and ſcared his Family moſt abominably. —— I have another Relation of Starving a Hog, but I have not Room here.

CHAP. XV.

Of Banking Meadow-Grounds.

OF Banking or Cutting up Ant-Hills. —— In this Month all Manner of Banking, or Cutting up Ant-Hills from off Meadow-grounds, ſhould be performed, as being ſo many Excreſcences, or ſuperfluous Earths, raiſed at firſt by Ants, or Piſmires, or Moles, which do great Damage to

all Meadow or Graſs-grounds; and, the more, as their Numbers are greater. Now this Work may be performed by three ſeveral Inſtruments; as the Plough, the Half-round Shovel, or with the Spade. Firſt, by the Plough, as being the Capital Inſtrument for this Buſineſs; by reaſon it performs its Work cleverly, and with ſuch Expedition, that it will diſcharge and cut up more Banks, or Hills, in one Day, than twenty Men can do; and this by only the Help of two Horſes a-breaſt, a Ploughman, and a Driver. The Dimenſions of this are as follows: The Width between its two Sides is three Feet ſeven Inches. Its two Sides are each of them three Feet ſix Inches in Length. Its four upright Standards are one Feet each in Height. Its two Handles, five Feet ſix Inches long each.

To its two Sides, that are made a little roundiſh, is fixed a Cutting-knife, about three Foot long, in the Shape of a roundiſh Cheeſe-knife, which, as the Horſes draw it along, cuts through an Ant-Hill at once, and leaves the Ground perfectly level. And, where there is Occaſion to raiſe or lower the Cutting-knife, it is done by heaving up, or pulling down the Handles of this Plough. Thus it may be drawn without any Hindrance, or Stopping, where the Ant-Hills ſtand thin. But, in caſe they ſtand ſo very thick, that the Horſes cannot go on, without treading on the Mole, or Ant-Hills, then there muſt be another Sort of Plough made Uſe of; and that is, the common *Foot-Plough*, as we call it; but it muſt be worked here without a Foot on; for, as this is to be drawn by Horſes in Length, they will much eaſier go over the Hills, than two Horſes a-breaſt, that have a three Feet wide Cutting-knife to draw after them; and, when the Foot-Plough is thus drawn by Horſes in Length, its narrow Share and Side-board will enter among the Hills, and demoliſh them a great

Pace.

Pace. This made a topping Ploughman take both theſe Ploughs into a Field, for clearing it of Ant-Hills; ſo that, where one will not do the Work, the other may. But to deſcribe this Ant-Hill, or *Newmarket*-Plough, I ſhall give a Deſcription of it, as I wrote and publiſhed it in my *Chilturn* and *Vale-Farming*-Book, Page 323, *viz.*

A Deſcription of the Banking or Ant-Hill Plough. — It was ſent from *Newmarket* into our Parts, and therefore is to us a new Plough, being ſent for, by a Gentleman of *Hertfordſhire*, to plow or cut up his Ant-Hills, or Mole-Banks: It is made in the ſame Manner our Harrow-Slides are, whoſe Sides of Oak or Aſh are three Feet long, ſix Inches thick, and three Feet wide; a little more forward than the Center, is an Iron, ſomewhat above two Feet long, four Inches broad, and about four Inches crooked, or winding in a circular Manner. This, at each End, comes under the Sides of the Plough, and is keyed up; ſo that its flat Edge lies a-croſs, almoſt even with the Ground. The fore End has two iron Staples fixed that the Horſes are faſtened to. The hind Part has two Handles, for the Plough-man to guide it by; and as it is drawn near a Mole, or Ant-Hill Bank, he bears it up, which a little lowers the Share for cutting through the Bottom of the Bank or Hill. But, in the Place where this Plough was intended for Service, it would not anſwer; becauſe the Banks or Hills were too large and too thick, ſo that the Plough-man invented a Method accordingly; and that was, by fixing a Fin of Iron a Foot and a Half long to the Foot-ſhare fixed in the Foot-plough; which did it effectually, by drawing this Plough backwards and forwards, as they do in Broad-land Plowing. As ſoon as the Plowing was over, Men with Forks put the Turf of theſe Hills together, and laid them in ſeveral Heaps,

Heaps, and, in about nine Months Time, they rotted, were ſpread about, and then a Gate or Hurdle was drawn with Buſhes, that diſperſed the Turf and Mould, all over the Meadow, to the great Enriching and Thickening of the Ground. But there is another Way of cutting up Ant-Hills by the Iron-plated Shovel, or Spade.

How Ant-Hills are cut up by the Iron-plated Shovel. — This Shovel is made with a thin Iron-plate, in the Form of a Cheeſe-knife, except a Sort of a Point in the Middle of its bottom Part: In a Socket of this, a wooden Handle is fixed, by the Help of which, a Man cuts and parts the Turf of an Ant-Hill in four Pieces, which he throws back to come at the Core of Earth, that with this Shovel he takes out, and throws about the adjacent Graſs-Ground; then he turns down the Flaps of Turf, and it is hardly perceived, where he had cut the Graſs-Ground; and, when the Field is thus cleared of Ant-Hills, we either throw, or beat the Mould about with Bandies. Or it may be laid in a Heap, and mixed with Dung, to lie and rot all the Winter, and kill the Piſmires. Or this Work may be done with a common Spade, though not ſo well as with the Banking-Iron, or Shovel, where a Perſon has no other. And thus the Piſmires, or Ants, will many of them be deſtroyed, but not all; for, though the Water enter and lodge in theſe Holes under the Turf, yet many of the Ants will live, and breed again, ſo as to raiſe new Hills, that will want the ſame Work in ſix or ſeven Years again. Others will only pare off the Ant-Hills ſmooth with the common Level of the Ground, and ſtrew ſome Clover, or other Graſs-ſeeds, on the ſame bare Place; and, in one Year, there will be as much Graſs as ever on it, which leads me to conſider the Nature of burning the Turf or pared-off Ant-Hills into Aſhes.

Why

Why Burning of Ant-hills into Aſhes is a wrong Method.—Here I muſt take Leave to obſerve, that whoever adviſes to uſe only one Sort of Management about Mole, or Ant-hills, is not of my Mind, for I write from Experience, as having cut up many Ant-hills, in the foregoing Manner; and notwithſtanding what has been ſaid, about Burning them into Aſhes, I will here ſhew how pernicious one general Rule is in this Affair. Firſt then, I will account for the not Burning them.—In the Vale of *Ayleſbury*, that begins about three Miles diſtant from my Houſe, their Land is a Mixture of black or bluiſh Clay mixed with a black Loam, free of Stones; and that has deſervedly the Name of a rich, marly Earth. In this Soil, a Gentleman has a Meadow, containing more than a hundred Acres, which was over-run with great and many Ant, or Mole-hills, and ſuffered ſo to be, by the Miſtake of an old erroneous Notion that his Forefathers entertained, that, where theſe were, there was the more Graſs, without conſidering, that the Tops of theſe Hills, in dry Summers, were generally bald and barren, by being burnt up; I mean the little Graſs that grew on them, was ſcorched up: So that there would be only ſome Graſs about their Bottoms, that the Hills ſhaded, and a ſmall Matter on their Sides. But the preſent Owner had more Wit, than to let ſuch Extuberances remain in their old Condition. Accordingly, he cut them down with a Fin of Iron, faſtened on the Share of a Foot-plough, as before; and then Forkmen followed, and put all they could get up into many Heaps, to lie and rot all the Winter; and when the Weather and Time had ſhortened their Subſtances, in the following Spring-ſeaſon, they were thrown about and ſpread over the Meadow. Now, I do aver, that this Method is far better than Burning them; and that, becauſe the Earth

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of theſe Ant-hills, ſo managed, not only thickened this Vale Meadow-ground, but ſerved as a laſting Dreſſing, or Manure, to the great Improvement of the Graſs-crops: Whereas, had theſe been burnt to Aſhes, they would, I muſt own, have proved very fertile for ſome few Crops, but would not anſwer the two great Ends of Dreſſing the Graſs-ground for many Years, and at the ſame Time, by adding a Thickneſs to the thin Surface of this ſpringy, wet Soil, keep it drier and firmer than it formerly was. However, notwithſtanding what I have here wrote of not Burning Ant, or Mole-hills, I will, in the next Place, ſhew, that, Burning theſe Hills may be done to a great Improvement. But, before I proceed to this, I have to obſerve, that ſome of the Vale-men take this Method to deſtroy their Ant-hills; They get a large wooden Beetle, and beat down the ſmaller Hills flat, believing that, by this, they cruſh the Ant-eggs, ſpoil them from Breeding and harden their Tops, ſo as to prevent the Riſing of the Ant-hill again, for ſome Years.

How Ant, or Mole-hills, may be burnt to a great Improvement. — The very ſame Gentleman, Owner of the Vale-meadow, I have been juſt writing of, is alſo Owner of Meadow-ground, about ſix Miles diſtant from it, in the hilly, or *Chilturn* Country. Here his Mole, or Ant-hills, conſiſted of a reddiſh, clayey Nature, with ſome Mixture of Loam, that he had cut up with the Iron-plated Shovel, or Spade, and carried to one great Heap, where they lay till *May*, or *June*, and then he burnt all in one Heap into Aſhes, thus: He firſt begun to lay a little Faggot-wood for a Foundation, and on moſt of that he laid on ſome intire Loam or Turf, and on that, ſome of the Ant-hill Earth; then he began to light his Fire, and, as it burnt, he put on more, till he increaſed the Heap to a very great Bulk, which to do in the beſt Manner, the Fire-

man

man continued laying on the Ant-hill Earth, ſo carefully, as to keep in the Fire very cloſe, for, if it had burſted out, it would have done but little Service. Thus, when all was burnt and calcined into Aſhes, he laid them on his Meadow-ground, but they did not anſwer his Expectation; becauſe a great deal of this reddiſh clayey Earth remained, after Firing, in the hard Body of many Pieces, almoſt like Bits of Brickbats, which he was obliged afterwards to collect and carry off, as being too hard a Subſtance for the Weather to diſſolve: This proves, that Burning Clay in a Heap, in the open Field, is not ſo good a Way as Burning it in a Clamp; and therefore a late Author, in his Treatiſe of Improving Clay-Grounds, is certainly abſolutely right, in his Publication of a Method how to burn wet Clay in the greateſt Perfection in a Clamp; becauſe, by this Method, Clay is brought to yield more Salts, than when burnt dry, and alſo burnt into a perfect Aſh, or Powder.—— Now why the Clay Ant-hills were burnt to Aſhes, and not ſerved as thoſe in the Vale were, I think wants no Explanation; and therefore I have no more to ſay on that Account; but I think it one of the greateſt Improvements in Huſbandry, to burn Clay (the red Sort eſpecially) to Aſhes, for Manuring either Meadow, or Plowed-ground, provided the Clay can be dug without any Damage. I confeſs, I have burnt ſeveral Loads of red Clay into Aſhes in a Heap in the Field, but never in a Clamp, becauſe my Quantity of Clay did not make it worth my While, for it was only what I had dug out of a Pond. And now, if any Gentleman thinks fit to have one of theſe Ploughs, that I have deſcribed, for cutting up Ant, or Mole-hills, there lives, on *Gaddeſden-Green*, a Wheeler, who makes them in great Perfection, at the Price of which pays for all of it, both Wood and Iron, and which may

be ſent to any Part of *Great Britain*, &c. if an Order is ſent to me, and Money for the ſame.

Of the Nature of Clay Aſhes, and when and where to ſow them for doing the moſt Good.— It is not only to burn Clay into Aſhes, but their beſt Application is alſo to be endeavoured. It is certain, that the Salts of all Aſhes whatſoever are a moſt powerful Enemy to the Breed, and Damage of all Inſects: And, therefore, it is obſerved by ſeveral Authors, they are good to ſow over Turnep-ground, *&c.* to prevent the Fly and Slug, and ſo they are. But Clay-aſhes are not an infallible Remedy; for, by great and continued Rains, their Salts will be waſhed away into the Earth, ſo as to make them loſe their Efficacy in keeping off Inſects: However, they are very valuable, as they ſerve to nouriſh the Turnep-crop. And, for doing that, theſe and all other Aſhes ought to be ſown on the Top of the young Turneps, as ſoon as they appear in their firſt green Leaf; and then two Cart-loads of them will be better ſown than one on each Acre, both of which will contain ſixty ſingle Buſhels. But I inſiſt on it, that neither theſe Clay-aſhes, Lime, nor Tobacco-duſt, will aſſuredly prevent the Inſect, becauſe their powdered Natures may be rendered ineffectual by Rains for this Purpoſe; nor do I know but of one Thing that will certainly do this, and not damage the Turnep, which I intend to diſcover, when I think it a proper Time. Clay-aſhes is alſo a moſt powerful Nouriſhment to all Wheat, Oats, Barley, Peaſe, and Beans, if ſtrewed or ſowed by the Hand out of a Seed-cott over them in the Spring-time, to the Quantity of three Cart-loads on one Acre, and the ſame Quantity on every Acre of Meadow-ground; then it will prevent the Growth of Moſs, bring up the Honeyſuckle, kill all ruſhy, ſedgy Graſs, and kill or prevent the Damage of the Grub, or Cankerworm. I have ſown five Cart-loads of

Wood-

Wood-aſhes on one Acre of Meadow, and found them not too much, provided they are ſowed on the ſame, in *December*, or in *January* at fartheſt; which is alſo the Time for Sowing Clay-aſhes on Meadow-ground. And, if ſuch a Ground is over-run with Moſs, four or five Inches in Heighth, it will be eaten or burnt off by repeated Dreſſings of Aſhes, as I have been an Eye-witneſs of; and where Moſs has got Poſſeſſion of Meadow-land, it certainly concerns the Owner to get it eaten off by Aſhes with all Expedition, becauſe this has Roots, and is nouriſhed by the Earth, to the Impoveriſhment of the Graſs. I knew a Meadow of near five Acres, that was ſo over-run with Moſs, that it returned the Owner but half one Cart-load of Hay in all one Summer; when, if it had been in good Order, it would have yielded ten Loads at leaſt, as it has done, ſince it has been cured of this deſtructive Weed; for this was an Upland Meadow of an extraordinary rich Soil.

Of the great Damage Ant-hills do to Meadow-ground.——It is but about twenty Years ſince, that the general Part of Gentlemen and Farmers, in *Buckingham* and *Hertfordſhires*, took upon them to deſtroy Ant-hills; becauſe, as I ſaid before, they were under the ſilly Notion of their increaſing Graſs in feeding Meadow-ground. But, now, the greateſt Part of them have diſcovered their Miſtake, as appears by their diligent extirpating theſe pernicious Hills out of their Fields, that I have ſeen ſo thick in ſome, that it was difficult for a Perſon to walk free of them. In my ſeveral Years Travels, I have often beheld theſe Hills with an Eye of Pity, and have made bold to declare the ill Huſbandry of their Owners; for, I muſt confeſs, it moved me into paſſionate Expreſſions, at the Sight of them, when I thought how deſtructive theſe, and Weeds, have been not only to the Tenant-

Farmer, but to many others; for theſe certainly prevent thoſe good Crops of Graſs and Hay, which would have grown under better Management, to the Benefit of Buyers in the Lowneſs of their Price. —A Gentleman, that I helped to the Purchaſe of a large Vale-Farm, did, about fifteen Years ſince, after a great many Arguments, perſuade his Tenant to pare off many Ant-hills that grew in his Mowing-ground, and at the ſame Time to take in ſome Graſs-ſeeds in their Place; which, in a little Time, brought all the Field into a levelled even Surface. But his Landlord could not prevail with him to act the like good Huſbandman, in his Feeding Graſs-ground; becauſe, here, the Ant-hills (though big enough to fill a Buſhel) did not hinder the Scythe. However, as it happened, the Tenant broke afterwards, and, in the Year 1739, the Gentleman was therefore obliged to take the Farm into his own Hands; and one of the firſt Things he did, was the cutting up thoſe Ant-hills his Tenant left behind, which he had carried off the Ground, and laid in one Heap with ſome Dung, to lie and rot, for Dreſſing his Wheat-land with the ſame; and it fully anſwered his Purpoſe, for he got the more Graſs and Corn by the Action.—— And now I hope, that this my Account, of the Damage Ant-hills do to Meadows, will prove a ſufficient Conviction to thoſe of my Readers, who have ſuch Ant-hills ſtanding in their Fields, as to incite them forthwith to cut and carry them away, and ſow Clover, Trefoil, or Ray-graſs Seeds on the bare Spot of Ground they grew on; that not only they, and others, in their Caſe, but the Nation in general may reap the Benefit of ſuch good Huſbandry, which will then anſwer my Wiſhes; for my Aim is, and always ſhall be, to uſe my beſt Endeavours, to improve my Country to the utmoſt of my Power; And I hope my Labours will be

crowned

crowned with that Succeſs, as may not a little contribute to this great End, that our happy Climate may become rather a Granary for ſupplying our Neighbours with Corn, *&c.* than oblige us to pray and pay for the ſame to them.

CHAP. XVI.

Of Planting Trees, *&c.*

THE right Time of Planting Trees.—October is certainly the beſt Month in the Year for Planting and Tranſplanting moſt Sorts of Trees; and therefore I ſhould have wrote on them in laſt Month; but, for Want of Room, I was obliged to poſtpone it till this. By planting a Tree ſo early as in *October*, the Roots have an Opportunity of getting a little Growth before Winter, or, at leaſt, to ſtrike themſelves into the Earth a little, ſo as to be ſecure againſt the Severity of Froſts; and, on this Account, I believe I may ſay, a Tree planted in the Beginning of *October*, if the Seaſon is favourable, will get a Year forwarder in its Growth, than one planted in *February*, or *March*; which is no ſmall Advantage to an eager Planter, who hopes to enjoy the Fruit of his Expence and Labour in a little Time: And, indeed, herein lies the chief Art of a Planter, to plant ſo that he may have a quick Return; for, as Man's Life is but ſhort, in Compariſon of a Tree's, it behoves him to prevent the uſual Diſcouragement as much as in him lies, viz.— *Of Planting for another to enjoy.*— It is true, that Planting may be carried on, if the Weather is open from *Michaelmas*, to the Time Trees begin to bud in the Spring. But Neceſſity is better prevented, than remedied; not, but that there may happen ſome particular Caſes, which may oblige a Perſon

a Perſon to tranſplant Trees even in Summer-time; as when he is forced to remove them in that Seaſon, or muſt deſtroy his Fruit-Trees, if he cannot carry them away, and tranſplant them ſafely in another Place; which very likely would anſwer better than what one of my Neighbours did, who, being poſſeſſed of a Houſe and large Orchard by Apron-ſtring-hold, felled almoſt all his Fruit-Trees, becauſe he every Day expected the Death of his ſick Wife, and then all Trees, ſtanding on the Premiſes, were to be another's. As to Aquatic, or Water Trees, that are beſt propagated by Slips, Roots, or Truncheons, the beſt Time is *February*, and till Trees bud, for Setting or Planting them, becauſe their ſpungy Nature obliges them to take the Water and Earth; and, as the Cold is then leſſened, the Sap will begin, and continue circulating by Heat and freſh Moiſture. So likewiſe, for Evergreens, or thoſe Trees that do not ſhed their Leaves, the beſt Time for planting, or removing them, is in *February*, that they may have the immediate Benefit of the increaſing Heat of the Sun, to put their glutinous Parts, or Sap, in Motion; or if they are planted, or tranſplanted in *Auguſt*, it will alſo be a propitious Seaſon for cauſing them to take the Ground in a little Time.

How it concerns a Planter to plant a Tree in an agreeable Soil, and in a right Manner.— It not only concerns a Perſon to plant a Tree at a right Seaſon of the Year, but alſo in a Soil agreeable to its Nature, and in a true Manner; for tho' a Tree, to be planted, be ever ſo full of Roots, and is at a proper Age to tranſplant, yet a right Soil, a natural Situation, and a proper Art ought, in the firſt Place, to attend the Operation, or elſe Expectation and Succeſs may never meet. Firſt, therefore, I ſhall make a few Obſervations on a proper Soil.

Of a proper Soil to plant Trees in.—— A proper Soil, in my humble Opinion, is almoſt as neceſſary to be regarded for planting a Tree in, as a proper Food is for an Animal; becauſe a Tree will thrive and flouriſh in ſome Soils, when the ſame Tree would pine and ſtarve in another. Examples of this have happened in many Places, one particularly, within a few Miles of me, where, after ſome Apple-trees had ſtood many Years, in a dwindling Condition, the Gentleman-Owner had them removed out of his gravelly Soil into a loamy one, and Pear or Walnut-trees (I have forgot which) planted in their Room, and then both flouriſhed a great Pace. —— The Beech-tree will not take to growing in ſome wet Vale Soils to Profit; and yet, in ſome others of a drier Nature, it will. In ſome Places of the Vale of *Ayleſbury*, after ſeveral Trials, it has been proved, that the Silver Beech will not proſper, becauſe their Soil is too wet for the Roots, and rather too warm for the Head; for this Tree, tho' it will grow upon a Clay Foundation in the *Chilturn* Country, yet, under that, it muſt have a dry Bottom, becauſe a ſpringy Ground is utterly diſagreeable to this Tree; and which I believe is the main Reaſon why a Beech will not delight in many Places in Vales.——See my large Accounts of the Beech-trees in my firſt Treatiſe of *the Timber-tree*, where I have amply wrote on its Nature, and the ſeveral Uſes it may be put to. Firſt, I have, at Page 47, inſerted Mr. *Houghton*'s Account of it. Secondly, Mr. *Lawſon*'s Account of Beech. Thirdly, That there is but one Sort of Silver Beech in *England*. Fourthly, The Difference of Beech, as to the Soil it grows in. Fifthly, The Profit of Planting Beech-trees. Sixthly, A new Way to make Beechen-timber laſt long. Seventhly, The Benefit a ſmoaky Room is of to this Wood. Eighthly, How Beechen-boards, on a Ground-

floor,

floor, were made to laſt near as long as Heart of Oak Boards. Ninthly, A very remarkable Example of many great Beech-trees that rotted by ill Management. Tenthly, To rend Pales out of Beech-trees. Eleventhly, The Age of Beech. Twelfthly, How a Horſeſhoe was found in the Body of a Beech-tree. Thirteenthly, The proper Size of Beech-trees for Boards. Fourteenthly, How Beech was ſold for Walnut-tree. Fifteenthly, The Damage of planting Beech-trees too near a Neighbour's Ground. Sixteenthly, The Duration of Beech. Seventeenthly, The Benefit of a large Beech-tree to a Turner. Eighteenthly, Of Beech-maſte, Page 60. And, in my ſecond Treatiſe on *Timber-trees*, I have likewiſe publiſhed many ſerviceable Matters relating to this famous Tree. Firſt, at Page 25, I have given an Account of the Nature and Improvement of the Beech. Secondly, How to get its Sap out. Thirdly, A ſecond Way of doing it. Fourthly, A third Way of doing it. Fifthly, Of the Management of the Beech in Timber Uſes. Sixthly, Of the Seed or Maſte of the Beech. Seventhly, To raiſe a Beech Wood from Seeds or Setts. Eighthly, Of Tranſplanting large Beeches. Ninthly, Obſervations on Tranſplanting. Tenthly, To raiſe a Beech-hedge by Seeds or Setts. The Black Cherry-tree likewiſe will not grow to a great Bulk in ſpringy Vale-grounds, becauſe their Roots agree not with ſuch ſpewy Earth. It is true, they will grow here; and I have ſeen ſome tolerable large, but they did not grow faſt enough for Profit. And yet, in the *Chilturn* Country of *Hertfordſhire*, where I am ſure we have more than in any other County in *England*, we plant them on a Clay Foundation, and have them grow into as large Bodies, or Trunks, as any Oaks are in our Parts; becauſe, under our Clay, is a Rock of Chalk; and ſo, in ſome Vales, I ſuppoſe, they

they will proſper, provided the Roots can grow in a dryiſh Bottom. (See more of the Black-Cherry Tree, at Page 127, in my firſt Treatiſe on the *Timber-Tree*; and at Page 64, in my ſecond Treatiſe on the *Timber-Tree.*) Both ſold by *Thomas Oſborne*, Bookſeller, in *Gray's-Inn*, who bought the Copies of theſe two Books of me. But, to be a little more particular in my Account of Soils, I have to obſerve, that, though there be the Horn-Beech, the Silver-Beech, growing in *England*, yet even theſe affect different Soils. The firſt delights in a gravelly Soil, the laſt in a chalky, or loamy one, as may be eaſily perceived by paſſing Travellers, by the great Numbers of Horn-beech Wood, and ſingle Trees of the ſame, in the *Eaſtern* Parts of *Hertfordſhire*; where they, for the moſt Part, grow in their gravelly Soils. As, in the *Weſtern* Part of the ſame County, the Silver Beech-Tree grows in numerous Woods, and in ſingle Trees of the ſame on Chalks and loamy Soils: All Trees planted on Plowed-Ground, or Ground that is a Sward, and has been lately Plowed-Ground, never thrive ſo well, as Trees planted on Sward-Ground, that has been ſuch, Time out of Mind; and therefore where Trees are to be planted on ſuch poor Ground, the Soil ſhould have the greater Aſſiſtance, as I ſhall obſerve by and by.

Of Situations proper for the ſpeedy Growth of Trees, and their bearing Plenty of Fruit, &c. ——— Sites of Ground, proper to plant Trees on, are perfectly neceſſary to be made Choice of, for their more expeditious Growth. I think it was near *Leybourne*, in *Buckinghamſhire*, that I ſaw a Parcel of Apple and Pear-Trees, planted on a low, wet Piece of Vale-Ground; which, indeed, was not fit to plant Trees on, had the Ground lain all in a level Poſture, becauſe the raw crude Nature of their ſpringy Water would be apt to chill the Roots in Win-

ter, bring on the quick Growth of Moſs, and cripple the Growth of the Tree. But the prudent Owner managed this Situation accordingly. He firſt plowed up the Ground into four or ſix Boutlands, as it appeared to me at a Diſtance, by which it produced a dry Situation in a wet Soil; and then, as moſt Vale-Earths are of a rich Nature, ſo here the Trees grew a-pace into large Bodies and Heads. All Trees that are planted high, or in the upper Part of the Surface, or on the very Top of it, have a greater Benefit from the Sun, Air, Rain, and Dews, than thoſe that are deeper planted; and therefore their Juices are better digeſted, and their Fruit invigorated with a ſtronger Spirit, as I have made appear at Page 152, in the ſecond Part of my *Timber-Tree* Treatiſe, in writing of Apple-Trees planted in the South Hams of *Devonſhire*. To plant an Elm in a *Chilturn* dry Sand, or Gravel, is as wrong as planting a Beech in a level, ſpringy, Vale Soil; and ſo others; but the meer Situation of even Standard Trees is not altogether to be regarded, as to the Soil they are to be planted on. There is another material Point to be well obſerved, in order to enjoy the greater Plenty of Fruit, which I ſhall ſhew by the Example of many Black-Cherry Trees growing on *Gaddeſden*-Green, or Common. The Village of *Little Gaddeſden* is compoſed of little more than one Row of Farm, and other Houſes; and for the greateſt Part their Fronts are ſituated to the South-Weſt. Now, before moſt of theſe Houſes, there is an open Green or Common, on which moſt of the Inhabitants have few or more Black-Cherry Trees growing, ſome budded with the moſt famous and moſt excellent black Kerroon, or Crown Cherry; others remain wild, as they were tranſplanted out of our Woods, where many ſpontaneouſly grow up from the Cherry-ſtones dropped there by Rooks, Jays, and other

other Fowl. Here theſe Trees ſtand very much ſheltered from the Violence and Deſtruction of North and Eaſt Winds, which in this Situation cannot greatly annoy them in their hazardous Bloſſoming Seaſon; ſo that theſe Fruit-Trees commonly hang full of Cherries, when others, that are expoſed to them, are oftentimes almoſt wholly deprived of any. A Truth that I have ſeveral Years wofully experienced, by the Situation of my Home Cloſe, where, for enjoying Diverſity of Fruits growing near my Houſe, I was neceſſitated to plant Trees there, fully expoſed to the Power of North and Eaſt Winds, in ſingle Rows, on the Graſs Baulks of my Plowed-Field; which, I believe, I may aſſert, cauſes me to miſs three Times, or more, to once of thoſe Trees that ſtand in a more ſheltered Situation.

Divers Ways of Planting Trees to Profit. —— Planting Standard Trees (the Fruit Sort eſpecially) is certainly one of the moſt beneficial Things that an Owner of Land can do; becauſe it is at firſt only a trifling Charge, will grow into Profit for an Age or two, and this for little or no Expence, during the whole Time. But as an Error committed, at their Planting, is oftentimes of fatal Conſequence, by Reaſon ſuch an Error keeps Company with the Tree to the laſt; I ſhall here publiſh ſeveral Ways of performing this Work, as it has been practiſed with Succeſs.

How a Standard Fruit-Tree has been planted in a Graſs-Ground, whoſe bottom Earth was a Clay. —— The Top-Earth was a good loamy Mould for a Foot deep, and then a red Clay began to appear. Now an Apple, Pear, or Cherry-Tree, bought out of a good Nurſery, ſhould be but four or five Years old, —— ſix or ſeven Feet high, and an Inch, or little more, Diameter: Such a one, with a full Furniture of Roots, is what I endeavour

to get; and, to plant it to Succeſs in ſuch a Soil, I break the Ground in a circular Manner ſix Feet wide, by taking out all the Earth for a Foot deep; then, on the red Clay, I lay a Parcel of Cow-Dung, mixed well with Straw or Mud mixed well with Litter; and when I have ſtrewed a little Virgin-Mould over this, I plant my Tree on the ſame; and then with ſome Virgin-Mould, that I took from under the Turf, I cover the Roots, and then lay the Turf-Graſs undermoſt over all in a Diſh-faſhion, for only about three Feet wide. As to the reſt of the Hole, I lay down the Ground with the Graſs-ſide uppermoſt, as I took it out, which will raiſe the Top-part ſomething higher than the common Surface at preſent: But in Time it will ſink to its old proper Level, becauſe the Clay and Worms will feed on and eat up the Dung and Mud in a few Years. This, in Courſe, will raiſe a Thought in my Reader, why I make a Hole ſix Feet wide, to plant ſo ſmall a Tree in. In Anſwer to this, I have to ſay, that, though the Roots of ſuch a little Tree are, at preſent, of a very narrow Circumference, yet Allowance is here made for their Spread and Run in an eaſy, looſe Manner, ſix Feet aide, by the undermoſt *Stratum* of Dung, which, by its nouriſhing Nature, attracts their thready Shoots into this ſoft Bed, where they run with great Expedition, cauſe the Tree to grow very vigorouſly, and ſoon acquire a large Body, and a Head bearing Abundance of Fruit. In the next Place, I ſuppoſe, it will move the Wonder of my Reader, why I plant a Tree in Dung, becauſe this ſeems contrary to all the public Rules of good Planting. To this I anſwer, That the Dung, here made Uſe of, is of a contrary Nature to all Horſe, Mule, and Hog-dungs, which are certainly of a very hot Nature, and therefore unfit to come near the Roots of a new planted Tree, leſt they burn, canker, and ſpoil them. But Cow-Dung

Dung and Mud are of different Qualities, as being of an unctuous cooſing Nature, that readily, and at once, receives and invelopes the ſmall Roots; inſomuch that they are immediately fixed in a Bed of Nouriſhment: Whereas, in the common Way of planting a Tree, its Roots are laid upon a looſe dry Mould, where ſometimes ſome of them remain in a hollow Condition, grow mouldy, and die; and then the Head of ſuch a Tree conſequently languiſhes and pines, perhaps, for many Years, affording the Owner a Proſpect for employing his Philoſophy, how to reſolve the ſeeming Phænomena into its true Cauſe; but theſe are not all the Reaſons for my adviſing a Bed of Dung or Mud to be laid on the Bottom of the clayey Foſs. There is another, and that is, becauſe, ſuch Clay being plentifully ſtored with fixed Salts, they will, as I ſaid before, in Time eat up ſuch Dung or Mud; but ſtill the Dung or Mud is not thus loſt; for by its gradual Diminution, they will ſoak in and ſtain ſuch a Clay Bottom near a Foot deep, and ſo much alter its hard crude Property, as to make it ſomewhat hollower and more nouriſhing, than it was in its original State for the Tree-Roots to grow in. But a Planter's Buſineſs is to prevent their Striking into the Clay, as much as he well can; for, at beſt, ſuch Earth is but a barren Soil. On this Account, the Bed of Cow-Dung, or Mud, is deſigned to be of great Service, as being laid a Foot and a Half wider on every Side than the Diſh-Bed, in which the Roots of the Tree lie; in order to encourage and draw their Spreading and Running horizontally, to avoid their penetrating into the clayey Bottom, and thus cauſe the Roots to attract their Nouriſhment from the upper and beſt Part of the Earth.

A Second Way for planting a Standard Fruit-Tree to Profit on a Clay Soil. ——— It is my Lot to live on a Hill, which has a large level Surface,

containing many fine incloſed Fields, of both Meadow and Plowed Grounds. Among which I have nine, and three that I rent of our Parſon. Now all theſe have a red Clay under a ſhallow Staple of good Loam, and therefore we are obliged to plow and plant accordingly. Here I have planted two ſeveral Ways; one by making a Foſs, and the other without breaking the Ground. The firſt I have given an Account of. The laſt was thus performed: I made a Trial on two Kerroon Cherry-Trees, which I planted in my Home Cloſe at a proper Diſtance. The one I planted as before, and the other I planted on the Surface of the natural Graſs-ground, without breaking it in the leaſt; for, as ſoon as I had placed my Tree, I laid ſome Virgin-Mould upon and about all the Roots. Then I laid a Parcel of Horſe-litter over that, and Mould and Turf over all in a Diſh Faſhion, the better to collect, convey, and lodge the Rains, leſt the greateſt aſſiſting Power of the Sun become the moſt deſtructive to the new planted Roots. Now theſe two Trees gave me a full Proof of the different Ways of planting on ſuch a Soil: The Tree that I planted on the natural Graſs, without breaking the Ground, out-does the other, and yet both are like to make Trees of the greateſt Magnitude, Black Cherry-Trees arrive to. It was, I think, about twenty Years ago, that I firſt tranſplanted them here, and now their Bodies are near twelve Inches Diameter, with large Heads, each of which is capable of bearing eight Dozen of theſe large Cherries. — Thus Fruit-Trees may be planted in a Clay bad Soil, with a Security againſt the great Loſs of Time, Expence, and Damage of Trees, in their being taken up again to be new planted, becauſe they were too deep and wrong planted at firſt; as has been the Caſe of too many, to my certain Knowledge, who were obliged to remove large Trees, after

ter they had been planted ſeveral Years for good, in order to improve their Growth, and make them bear better afterwards. And altho' I have, in the fore-going Account, confined my Pen to write on a Clay-Soil, yet the Damage of planting Fruit-Trees too deep may likewiſe be attended with as bad Conſequences in a gravelly, ſandy, or hurlucky chalky Soil, as I ſhall make appear by what I am going to give an Account of as follows, *viz.*

To plant a Fruit-Tree in a hurlucky, chalky, gravelly, or other ſuch light Soil, to Profit. ——— Of this Sort of chalky Earth, there are great Quanties of it lie in *Ivingboe* and *Piſtone* Pariſhes in *Bucks*, which, of itſelf, is a miſerable Soil to ſow or plant in, becauſe it is of a ſtony Subſtance, naturally barren; but, as it is commonly furniſhed with a looſe chalky Surface, it gives the Farmer an Opportunity, by double dreſſing or manuring it, and ſeaſonably plowing it, to get good Crops of Corn off it in ſome Years; and a Planter, with the Application of a maſterly Art, and good Aſſiſtance, to enjoy a fruitful Tree; for, without theſe two Qualifications, he will have the ſame Fate as a Gentleman I know had, who ſtrove many Years to get fruitful Plantations of Cherry, Walnut, Apple, and Pear Trees on his white hurlucky Ground, but was very much baulked in his Expectation, becauſe the Trees did not thrive to his Wiſh; and this happened chiefly on Account of his planting them almoſt on the bare hurlucky Chalk, and too deep. Now, to prevent this Way of Planting a Fruit-Tree in a Chalk, Gravel, Sand, or other ſuch light, dry, poor Earth, I would proceed in this Manner, *viz.*— Firſt, I would make a Hole, or Foſs, three Feet deep, and four or five wide. When this was done, I would lay a Parcel of Virgin-Mould, being that which lies next under a Graſs Turf, at the Bottom of it, for a Foot deep.

On

On this I would lay a Bed of Cow-Dung, mixed with chopped Straw, or Mud mixed with the ſame, another Foot deep. Then I would mix ſome Virgin-Mould with the Cow-Dung, or Mud, and lay over the laſt two for four Inches thick, and on this I would plant my Fruit-Tree; which, when done, I would fill the Hole, or Foſs, up with Mould, and — Turf, making a Sort of Hollow, Diſh-like, juſt over the Roots, for three Feet wide, the better to convey the feeding Rains to them, and more than ordinary to force on the Growth of the Fruit-Tree. — Theſe two particular Ways I never, before this Time, publiſhed in any of my Works: And, I hope, for theſe, and many other moſt ſerviceable Secrets, that I have made known, and thoſe I intend further to publiſh, not only in theſe Monthly Works, but alſo in others that I deſign to write: Gentlemen and Farmers will be ſo good, as to encourage me, in ſuch my uſeful Endeavours, for the univerſal Benefit of *Great-Britain*, in buying up my Books; and, if I live to finiſh five Books more, to compleat the Year, I intend one particular Volume, on curious Subjects, that, I think, I may ſay, were never yet wrote on by myſelf, or any other, that will require near twenty Cuts; and which will, perhaps, enhance the Price of the Book to five or more Shillings: And, for defraying the great Expence of ſuch an Undertaking, it is very probable, I may be obliged to Subſcriptions; when I hope, I may meet with an Aſſiſtance accordingly. — But, for farther proving the ill Conſequence of wrong Planting Fruit-Trees, I ſhall here tranſcribe what the Reverend Mr. *Laurence* has wrote on the ſame, at Page 40. in his Book of the ſecond Part of Gardening, intituled, *The Gentleman's Recreation*, as follows, *viz.*

The Reverend Mr. Laurence's *Account of wrong Planting Fruit-Trees.* — One Cauſe of Barreneſs in Fruit-

Fruit-Trees, is an unskilful Ordering and wrong Management of Fruit-Trees in their Planting. The Case is here much the same in the Vegetable, as it is in the Moral World. Every one knows how fatally Youth is commonly enslaved to bad Courses, for Want of setting out right at first, and being well instructed and seasoned with virtuous Principles. Corrupt Nature will soon over-bear the weak and tender Dispositions to Goodness in Youth, without an early Care, and wise Government: By the Help whereof head-strong Passions are subdued, and all the wild Sallies of a vicious Inclination are kept within due Bounds. And so, by the Blessing of God, the Man thereby becomes fruitful in good Works, and useful in his Generation. So also here in the Vegetable World, it is of great Consequence to the Goodness and Prosperity of a Fruit-Tree, that it be rightly managed and kept in due Order from the Beginning. An Error in the Beginning proves often fatal, and is not so easily rectified afterwards, without great and too dangerous Videncies. But let us examine this Matter a little more particularly, that we may the better know how to apply the proper Remedy: First, there is no Mistake in the Art of Gardening, that I have observed to be more general and common than this, of Planting Fruit-Trees too deep in the Ground; and yet nothing is more fatal to them, especially in some Grounds too much subject to Moisture in the Winter; and nothing tends more to keep Trees in a sickly unthriving Condition, and consequently from bearing either much, or good Fruit. Indeed, where the Soil is naturally exceeding dry, and lies on a Declivity, that will quickly carry off the Winter Wets, the Fault may be less dangerous; but, except there be a sufficient Depth of natural good Earth above the Rock, or Gravel, the Evil, complained of, will there quickly discover itself, after

four or five Years, when the Roots of the Tree will be ſtaryed by a hungry Gravel, Sand, Chalk, or Rock, or whatſoever the Bottom be that lies too near the Surface. On all Accounts, therefore, it is a much better and ſafer Way, to plant high, provided Care be but taken the firſt and ſecond Year to keep the Roots tolerably cool and moiſt: To which I add, that I am well aſſured, nothing is more fatal to Fruit-Trees, the tenderer Sort eſpecially, than planting them too deep, and thereby ſubjecting their Roots to too much Wet in the Winter (for Summer Wets never hurt them.) I alſo here cannot but earneſtly recommend the making Uſe of the beſt untried Earth that can be got, for filling up the Trenches, having had long Experience, that no Sort of Compoſition, made with Coſt and Art, can exceed the Riches of this Earth, or will make more vigorous, healthful, and laſting Trees. There is, ſays this ingenious Gentleman, another common Miſtake, committed in Planting, which is attended with very unhappy Conſequences, and that is, Planting the Trees too near one another; the Miſchief whereof is very manifeſt, when they begin to croud and ſhoulder one another. But, beſides this, there is another Damage attends Planting Trees too near each other; which is, that the Roots of the Trees will quickly meet, and ſo rob one another of the proper Nouriſhment they ſhould receive. Whereas, when Trees are planted at their due Diſtances, their Roots do ſtill receive new Succour, and freſh Nouriſhment, as they advance, and as the Head of the Tree increaſeth to require it; whereby an agreeable Health and Vigour is retained a long Time, even for many Years. Thus far Mr. *Laurence.* —— There are ſeveral other Ways of preparing wet Ground to plant on, as by draining it, or pitching its Bottom with Stones or Tiles, to keep

keep the Roots from deſcending; but, as I have not Room in this Monthly Book to enlarge on it, I ſhall proceed to give an Account of what an ingenious Gentleman has lately undertaken to do, in the Improvement of his Eſtate, by Planting, as follows; *viz.*

How a Gentleman has begun Improving his Eſtate, by Sets, or Plants, and Seeds ſent him by the Author, after a new Method. — I call it a new Method, becauſe, I believe, few, and very few, have fell in with the ſerviceable Notion of furniſhing their Grounds with theſe uncommon, but excellent Seeds and Plants, according to the Particulars I am going to mention; which, I hope, will be a Pattern for many other to imitate, as well for the Sake of their Ornamental, as Medicinal, and other profitable Qualities.

A LIST of the SEEDS and SETS.

500 Acorns of the Evergreen Oak.
500 Of Beech-Maſte.
1000 Beechen Sets.
2000 Bay-Tree Berries.
2000 Laurel Berries.
12 *Lignum Vitæ* Berries.
2000 Horn Beech Seeds.
2000 Cypreſs Seeds.
100 Cedar-Tree Seeds.
1 Pound of Juniper Berries.
20 Almond Nuts.
20 Service-Tree Seeds.
1 Pound of *French* Furz Seeds.
300 Of Arbele Plants, called *White-Wood* in your firſt Part, at Chapter the 18th.

The Copy of a Letter from the Gentleman, for the ſending him the above-mentioned Seeds and Plants.

'*Mr.* ELLIS,

'I Have purchaſed your firſt and ſecond Part of 'the *Timber-Tree*. In your firſt Part, you 'tell your Reader, you can furniſh him with ſome, 'if not all, that is mentioned above, if applied to 'in Time. I hope this will not come unſeaſon-'ably, being deſirous of making ſome agreeable Al-'terations, where I have pitched my Tent, in 'Planting, that being my Taſte; and as it 'will give me infinite more Pleaſure to have 'raiſed my Hedges, *&c.* from Maſte, than Plants, 'I hope you will uſe your Endeavours to poſſeſs 'a young Planter of ſo great a Happineſs, who 'in Return aſſures you, he himſelf will ſee your 'Directions (for each) followed cloſely. If you 'cannot let me have the Whole, I deſire what 'you can conveniently; you may ſend them 'by the *London* Carrier, directed for me at ——. 'And I am,

Sir, Your unknown Humble Servant

29 *September* 1742.

Theſe Plants and Seeds I ſent the Gentleman in the beſt Seaſon of the whole Year, *October*, and in the greateſt Perfection; which ſo pleaſed him, that he not only ſent me my Price, but alſo a Preſent beſides, according to the Purport of the following Copy of his Letter.

A Copy

A Copy of a Letter from the ſame Gentleman, after he had received the Sets and Seeds.

Mr. Ellis,

'I Have received all the Sorts of Maſte ſent 'for (except the *Lignum Vitæ*) and am in-'formed by my Servant, that Mrs. *Hocket* paid the 'the three Guineas (ſent her according to my 'laſt) the laſt Journey to Mr. *Tibbet* for your 'Uſe. I am ſorry ſhe proved ſo dilatory; I 'did all in my Power to prevent it, and have this 'Night ſent you a Gaunder, which was brought 'to me for a Gooſe; I have no Stubble Geeſe 'upon my own Grounds; I have now Company 'with me, therefore muſt conclude myſelf

Yours, &c.

I laid the Maſte in Sand, purpoſing to plant my Hedges in the Spring. 17 Nov. 1742.

Thus I have obliged this worthy Gentleman, and am ready to do the ſame at a reaſonable Profit to any other, with as much Fidelity, though altogether a Stranger to me, as if I was their intimate Acquaintance. And I am likewiſe ready to anſwer all Letters relating to any Subject I have, or may write on; provided the Poſtage of ſuch Letter is paid to my Houſe, or it is franked, directed to me at *Little-Gaddeſden* near *Hempſtead* in *Hertfordſhire*, which is thirty Miles from *London*. And I am in Hopes of having many ſuch Commiſſions for Sets and Seeds; which may not only be ſome Advantage to me, but more to thoſe Gentlemen, who may thus make every Field a Garden, or a pleaſant recreative Place, both in Summer and Winter, by planting the ſeveral Evergreens, *&c.* that

are

are mentioned in the aforeſaid Liſt, which will keep off the ſtormy Winds from Corn, Graſs, and Cattle, forward the Ripening of all Vegetables, cauſe Cattle to eat their Meat with Pleaſure, and thrive a-pace on the ſame, increaſe Wood and Fruit in the cheapeſt Manner poſſible, and, in particular, make a laſting and impenetrable Incloſure, as I am going to ſhew.

How a laſting and impenetrable Incloſure may be made by planting proper Sets, or ſowing their Seeds.— This Sort of Planting is certainly of very great Conſequence to Owners of Land, where an Incloſure is to be made for Fencing, in either Plowed or Meadow-ground, Woods, or Parks, Yards, or Orchards, *&c.* and may be performed by either Sets or Seeds. If by Sets, and they are drawn at a proper Age and Bigneſs, and planted at a right Time, in a good Soil, and in an artful Manner, they will get the Start of Seed by four, five, ſix, or ſeven Years; which is an Advantage, that many ought to covet an Account of obtaining an early Enjoyment of ſuch their Labour and Expence, and this more eſpecially in Planting, above any Thing elſe in Huſbandry; becauſe, at beſt, Trees are tedious Growers, but much more ſo, when Ignorance and bad Sets and Seeds accompany the Undertaking. And now, among the many Sorts of Vegetables proper to be planted in Hedges, I ſhall here become an Advocate for Raiſing the Evergreen Sort, becauſe theſe will ſupply the Owner with Pleaſure and Profit, in Winter, as well as Summer, when all other Trees and Shrubs appear with their naked Heads, and ſuffer bleak Winds to have a free Paſſage through their large Vacancies, to the Damaging of Corn, Graſs, and Cattle, when the Evergreen ſtill preſerves its conſtant, uniform, full Growth in a cloſe Head, and, I think, I may ſay, Body too; becauſe theſe may be made to carry

ſy up either a Spread from the very Ground, or to grow in ſuch cloſe, woody Bodies, that not a Dog, Cat, nor Hare can paſs between them; and this to a great Altitude, even to above twenty or thirty Feet in Heighth: And, therefore, is an excellent Contrivance to keep out Vermin, Cattle, and incroaching Thieves out of Fields, Woods, Parks, and Gardens, in ſo ſure a Manner, that there is no ſuch thing as forcing an Entrance through them, without leaving thoſe Marks of Violence, which the Law prohibits under ſevere Penalties. Thus a Perſon may enjoy an impenetrable Fence againſt almoſt all Sorts of Cattle, free of the Charge of Cutting or Plaiſhing; for theſe, when once they have thoroughly taken the Ground, will grow of themſelves in ſo cloſe a Poſture, as to ſupply the great Expence of Paling or Walling, or thoſe looſe Woods that are commonly planted for Incloſing of Fields, *&c.* and in Time will return great Quantities of profitable Woods, neceſſary for Building, and Making of Utenſils. To anſwer then theſe great and ſerviceable Ends, Sets of the Evergreen Oak would certainly be very advantageous, for anticipating ſome Years of Growth, by Seed. But, as they are but lately introduced into our Nation from *America*, the Seeds can be had, when the Sets cannot; and therefore I am obliged to recommend their Acorns, which I can furniſh a Perſon with at any Time of the Year. But for more of the Evergreen Oak, ſee my ſecond Treatiſe of the *Timber-Tree*, at Page 17. Secondly, and next to this, I would recommend the Cypreſs-Tree, as an Evergreen beautiful Sort, that will grow into a goodly Bulk and Stature, fit either for Hedge, or ſingle Trees. In a Hedge the Cypreſs may become very ſerviceable, as it is a Vegetable that will bear Cutting from the Ground, and then as often ſpring afreſh into a fine high Spread of twenty,

or

or more Feet high: Or may be made to grow into an impenetrable Hedge, for anſwering the ſame Purpoſes as the Evergreen Oak, by ſuffering the Seed-ſhoots to run up into cloſe Bodies that may ſtand for the firſt ſeven Years, at one Foot aſunder, and ſo on, till in Time they cloſe, or grow to the Touching of each other's Body. The Sets of the Cypreſs are not eaſily got; but their Cones of Seed, which grow on the Male-tree, I can furniſh at any Time, and, by them, theſe Sorts of Trees may be raiſed at a ſmall Expence, in a very ſafe Manner; for theſe very well agree with our Climate, and may be made to grow into ſuch thick, high Hedges, either by being cut into Shapes at Pleaſure, or let to grow wild in the natural Way, as to keep off the exceſſive Power of the greateſt Winds, from Fields, Gardens, and low Houſes. But, as I have not Room here to enlarge further on the many good Properties belonging to the Cypreſs, I recommend my Reader to the Peruſal of a large intire Chapter that I have wrote on the ſame, in my ſecond *Timber-tree* Treatiſe, at Page 113. Thirdly, and next to the Cypreſs, I ſhall write on the excellent Cedar-tree, for its many tranſcendent Qualities; and in particular, for its univerſal Properties of Growing in the hotteſt and coldeſt Countries, in boggy, or dry Grounds. Of this Tree, there are two Sorts; I ſell the Cones or Seeds of *Virginia* Cedar, and thoſe of the Cedar of *Lebanon*, both which may be as eaſily propagated as Oaks from Acorns, or Beech from its Maſte. And thus the Cedar may be made to grow in great Plenty, either in fine large Trees, or in delicate ornamental high-cut Hedges; or in Hedges after the wild Manner, or in the impenetrable Method of Planting them a Foot aſunder, for growing ſo cloſe, as to become a ſecure Fence to any Field, Wood, Garden, or Park, *&c.* Thus, in either Shape, this

Tree

Tree will grow and anſwer to great Conveniency, Profit, and Pleaſure; and the more, as it is a Tree that no Worm can ever breed or lodge in, will laſt for ever, and yield a moſt odoriferous Fragrancy: It is therefore to be lamented, that Perſons of Ability do not fall into the ſame Taſte for Planting this and other moſt valuable Trees as the Gentleman has done, according to his Letter, I have before mentioned. But, for my Reader's further Information, let him read my Chapter on this Tree, at Page 130, in my ſaid Treatiſe of the *Timber-tree*.—The fourth and next will be the *Lignum Vitæ Tree*, that I ſhall write on; becauſe this is a goodly Evergreen, will grow into a large Body and Head in a rich Soil, and is endowed with thoſe medicinal Properties, as in ſeveral Reſpects outdo all others. It is called *Guaicum*, *Pock-wood*, or *Lignum Vitæ*, will bear Cutting or Lopping, and may be made to grow not only in Trees, but alſo in Hedges of any Shape, and will produce a moſt ſtrong and laſting Fence. There is a large Tree of this Sort now growing at *Gaddeſden-Hill*, in a red, clayey Bottom, where it has ſtood, Time out of Mind, in a ſound Condition, and may very likely laſt Hundreds of Years longer. Its many and great Vertues have deſervedly given it the Name of the *Tree of Life*; and accordingly, I have, in my ſecond Treatiſe of the *Timber-tree*, wrote a large Account of the ſame, at Page 85.——The fifth Evergreen, I am here to write on, is the Yew, whoſe Beauty, Strength, and Profit have tempted many of late to make it a conſtant Inhabitant in the Incloſure of their Gardens, to break off Winds, prevent Cattle, and add a delicate Ornament to the Place, by planting its red Berries or Seeds firſt in a Nurſery, and then its Sets, for growing up in Standard-Trees, or in a Hedge to be cut and kept in a thick, delicate Wall-Poſture, or at a Foot

Diſtance to run up ſo cloſe, as to become an impregnable Fence for a Field, Wood, Garden, or Park, by letting them ſpire into Shoots accordingly; which, if aſſiſted with a proper Manure at ſeveral Times, will cauſe their ſpeedier Growth, as I ſhall direct by and bye. The Wood of this Tree is of ſuch an excellent Nature, that it outdoes moſt others, for ſeveral extraordinary Uſes, as I have obſerved in the ſixteenth Chapter of my ſaid ſecond *Timber-tree Treatiſe*, at Page 101. —— The ſixth Evergreen is the hardy, ornamental Holly, that may be juſtly named *the Fence of Fences*, becauſe its tough Wood, and prickly Leaves, and cloſe Growth make it almoſt impenetrable, when it grows in any Shape of Hedges, either cut, or uncut, and therefore will, the beſt of all other Evergreens, prevent the Breaking in of Cattle, or even Vermin into Fields, Woods, Parks, or Gardens. But, in a more ſurer Manner, if the Sets are allowed, and kept trimmed, for growing into naked Bodies of Trees cloſe to one another, where they will endure for Ages. But whether the Holly is planted for growing in theſe upright Tree Spires, to ſupply the Want of Paling, or Wall, or if in a cut Hedge, it certainly withſtands the Invaſion of Man and Horſe, the beſt of all others; ſo that a Field, Garden, Wood, or Park, may, by this Vegetable, be ſecured againſt all Attacks, and the good Man's Territory defended againſt his greateſt Enemy, the wicked Man, the beſt of all others. See my Chapter on the Holly, in my ſaid Book, at Page 92.—The ſeventh is the Box-tree, another moſt hardy, beautiful Evergreen, whoſe Wood is of more Value than any other that grows in *Great Britain*: But, as this is a moſt ſlow Grower, it has diſcouraged many from propagating its Species, ſo that, at preſent, we are forced to ſend for it from *Turkey*, and other Foreign Parts, to ſupply the Want

Want of the Mathematical Inſtrument-Maker, the Engraver, the Carver, and many other Artificers, which makes it ſell at a great Rate. When Box is planted as a Hedge, it may be kept in ſo thick and cloſe a Growth, as to become not only a very good Fence for Fields, Parks, Gardens, Woods, and Wilderneſſes, but alſo to ſtrike the Eye of the Beholder with Pleaſure, to ſee its yellowiſh Leaves and ſtrong Wood ſtand like a Wall, to break off Winds, and prevent the Incurſions of Cattle and ſtrolling Vagrants into honeſt Men's Grounds. In ſhort, the Box deſerves Planting, for many profitable Reaſons, particularly, for its growing in chalky and other barren Soils, and giving the beſt of ſafe Shelters to Rabbits, Singing-Birds, and other Fowls, as I have more largely made appear in the ſeventeenth Chapter of the *Timber-tree*. —And now follows, Eighthly, The hardy Evergreen Pine, or Fir-tree, whoſe Value is well known, by the univerſal Service its Timber and Boards are of to the greateſt Part of *Europe*, for Building, and other moſt neceſſary Occaſions. It is a very ornamental Tree, growing to a very great Bigneſs and Heighth in a few Years, for no Evergreen runs up ſo quick as this; inſomuch that, at fifty or ſixty Years of Age, it is at its full Growth. And thus, by ſuch its quick Growth, profitable Wood, and ornamental, pyramidical Evergreen Head, it ought to encourage its Planting more than ordinary, and the more for the fine Hedges it may be planted and cut into; but moſt of all for the ſhady, beautiful, wholeſome, and pleaſant Walks, that may be made by planting theſe Trees on loamy Hills, or in the ſtiff Soils of Vales, in hot and cold Climates, to the greateſt Profit. Its many valuable Uſes, I have deſcribed in a large Chapter I have wrote on it, in my aforeſaid Treatiſe, will, I doubt not, give my Reader ſuch Satisfaction, as to make him fully ſatisfied

with laying out two Shillings in the Purchaſe of the aforementioned *Timber-tree Book*.—The ninth Evergreen, I ſhall here take Notice of, is the Bay-tree, which has ſeveral good Properties belonging to it. It will grow into a Standard, or Wall-tree, or in a thick, high Hedge, is very ornamental and ſhady, by its large, ſtrong, beautiful Leaves, and therefore by ſome planted about their Gardens. Both its Leaves and Berries are Medicinal, and made uſe of on many Occaſions, by the good Houſewife, who covets to have one of theſe Trees planted near the Dwelling-Houſe, that ſhe may enjoy its Benefits, on any emergent Want. They are much propagated for growing in Pots and Tubs, to adorn the Yards, Gardens, and about the Windows of City and Town Houſes; and thus afford a pretty Show both in Winter, as well as Summer.——The Tenth Evergreen is the Laurel, that I ſhall here take Notice of, for its tough Wood, hardy Nature, and ornamental Show. Its Wood is next to Box, for Solidity of Body, and its hardy Nature makes it grow in clayey Soils, and even under the Drip of Eves of Houſes; and, for Ornament, it is planted in Viſtoes, Avenues, and Gardens. With its Berries, ſome People make a Wine, while others refuſe it, on Account of a poiſonous Quality attending both its Leaves and Berries, as I have more largely wrote on in my ninth Chapter of the *Timber-tree*. The Verdure of Evergreens is maintained and preſerved, by an oily, tenacious, viſcid Subſtance, reſiding between the Bark and Trunk; inſomuch that they bid Defiance to the moſt inclement Froſts, as a certain Author well obſerves.— The Eleventh is the Ivy Evergreen Tree, or Shrub, which is good for many Purpoſes. It may be made to grow in an ornamental Way to the Walls of Houſes; but it is ſeldom done, becauſe it grows in common, in a twiſting Manner, about Oaks,

and

and other Trees. However, let it grow where it will, it has ſeveral good Qualities belonging to it, both in the Medicinal, and in the Artificer's Way. The Turner, in particular, is concerned in its fine Wood and Colour, that, in *Tunbridge* Wooden-Ware, makes a pretty inviting, greeniſh Show. Its Leaves are excellent wholeſome Food for Sheep, and other Beaſts; and its Stalks and Leaves, very agreeable, when they are made to grow in the Cover of Arbours, as I have ſhewn in my Thirty-ſixth Chapter of the *Timber-tree.*——— The laſt and Twelfth Evergreen, I ſhall take Notice of, is the Juniper-tree, or Shrub, which is a hardy Vegetable, growing in almoſt all Sorts of Soils on Commons, or in Hedges, in a Shrub, or Buſh Faſhion, or in the Tree Shape. It alſo may be made to grow ſo, as to cover an Arbour, or make a good Fence to keep out all Sorts of Cattle, by its prickly Leaves. Its Fruit, or Berries, are of the moſt wholeſome Sort, as appears by the great Conſumption of Juniper-berries, by the Diſtiller, *&c.* Its Wood has made Cheſts, Tables, and many other Utenſils, when grown in a rich Soil, to its full Bigneſs, and in a hot Country; for, in ours, it ſeldom is ſuffered to grow out of the Buſh, or Hedge Faſhion, for the Sake of its Medicinal Berries; as I have more fully ſhewn in the Twenty-fourth Chapter of my ſaid Book.

Of Planting a Beechen Hedge.——— In *October*, or about the Beginning of this Month, you may ſafely plant the Sets of Beech; and, when it is done, by a clever Workman, in a good Soil, they will grow a vaſt Pace, make in Time an impenetrable Fence, or may be cut down at about twenty Years, and for Axle-trees for Coach, Cart, or Waggon; but there muſt be great Care uſed to preſerve the Beech in its Infancy, for this particular Tree differs from moſt others, in that it muſt not have its natural

natural Head cut off at Planting, nor bit off by Cattle; if it is, it very likely may die, as many have done. But one of the chief Benefits of this Tree is, that it will thrive in poor, chalky Soils, and flouriſh in the profitable Growth of Wood and Maſte: And, for the ſake of theſe good Properties, Standard-Trees and Hedges ought to be planted in ſuch chalky or gravelly Soils; and alſo becauſe they will furniſh their Owner, once in two or three Years, with vaſt Quantities of Food for Deer, Swine, and Fowls, for ſeveral of the Winter Months; and at laſt the Beech-tree will fetch Sixpence or Ninepence a Foot for its Timber, after it has ſtood a hundred or two of Years. It is propagated by Seeds or Sets that will in Time be big enough to produce great Plenty of Maſte or Fruit for making ſuch an excellent Oil, that none exceeds, but the Olive. I might very much enlarge on the Profit of planting this Tree; but this is largely ſupplied by what I have wrote on it, in my ſaid *two Timber-tree* Treatiſes.

How to make an impenetrable Fence for Parks, Woods, Fields, or Gardens, by planting of Witch-Elms. —— This Tree, eſpecially for a wet Soil, has been thought the propereſt of all others, for growing into an impenetrable Hedge or Fence, for ſecuring Parks, Fields, Woods, or Gardens, againſt the breaking in or out of Cattle; and therefore Elms have been thus planted for ſupplying of Walls, Paling or common Hedges; accordingly this valuable Tree will anſwer very well, if young Elms are tranſplanted of about eight Feet high, and two Inches thick in their Bodies, within a Foot of each other. And, if theſe are at firſt kept faſt in their Place, by binding with Withs each one to another, or otherwiſe, till they have taken the Ground, and can ſtand firm without any Help, they will, in a few Years, ſo enlarge their

their Bodies, and grow ſo near together, that a Weazel may not paſs between. Or, for producing ſuch a Fence, the Sets of Elm may be planted in the Form of a Hedge, and be nouriſhed up to the Perfection I am writing of. I have heard of a Park that has been thus incloſed, to great Safety and Profit. But obſerve, that the Elm, I would recommend, is not the common Elm, for that will not anſwer here like the Witch-Elm. It is the Witch-Elm that I would prefer for this Purpoſe, becauſe this will ſuffer Lopping much better than the other, will ſooner grow into a large Body, and yield a Brouſe for Deer, or Conies, that will nouriſh them very faſt in the Winter hard Weather, becauſe the Bark of this Tree is a moſt pleaſant healthful Food for them, and which they will greedily eat in Froſty and Snowy Seaſons. Now this excellent Witch-Elm is a Sort that is not to be met with but in very few Places, nor are its beneficial Qualities known but to very few. If it was more known, I am perſuaded Thouſands would plant this Tree, that are quite ignorant of it, for the Sake of its faſt Growth in ſwampy or dry Soils, to the greateſt Bulk of Trees; and for its delicious ſtringy Bark, as I ſaid, that Deer and Conies will eat to the laſt Bit. Obſerve alſo, that, if this Tree is tranſplanted at any Bigneſs, its Head muſt firſt be intirely lopped off. But, of this valuable Witch-Elm Tree, ſee more in a Chapter I have wrote on it in my firſt Book on the *Timber-Tree*, at Page 52. Alſo, in my ſecond Book, I have given an ample Account of the common Elm. Firſt, Elm deſcribed. Divers Sorts. Their Bulk. How to raiſe them. Divers Ways of propagating Elms. Tranſplanting Elms. More of Tranſplanting Elms. How Walks of them in *Spain*. What Land pleaſes the Elm. Elms leaſt hurtful to Corn and Paſture-

ſture-Ground. How to plant Elms. *French* Elms. Grafting of Elms. Felling of Elms. Uſe of Elms. Elm like Ebony. Other Uſes of Elm. Inward Bark of Elm. How to plant Elms with Quick-Sets. Hollowneſs of Elms. Elms for Water-work. Shelter. Mr. *Lawſon*'s Account of Elm in *Carolina*. The Difference of Elms. How an Elm was damaged by the Loſs of an Arm. The Wheeler's Way of ſecuring Elms from the Damage of Weather, Chapter the Fourth, at Page 61. To conclude this Chapter of Elms, I here offer my Service to furniſh any Perſon with the ſcarce Sets of the Witch-Elm Tree; and this I am the more capable of doing, becauſe, in our Neighbourhood, the Witch-Elm grows in Plenty, both as a Standard-Tree and Hedge-Wood. But, as there is another Way practiſed by ſome for raiſing an impenetrable Fence, I ſhall proceed to give an Account thereof as follows:

How to make an impenetrable Fence for Parks, Woods, Fields, and Gardens, by planting the Aſh.— I am here got to my laſt Article on this Account, and that is to ſhew how ſuch a Fence may be made, by planting Aſh; and this I do from what I have done in a certain Park, where, about four Years ago, a Parcel of young Aſh-Trees of eight Feet high, and two Inches thick, were planted at about a Foot Diſtance, juſt within the Park-Pales, which were held in an upright Poſture, and confined in the ſame by being tied by Withs; and, for their greater Security, Buſhes were laid on their open Side to a good Heighth and Bulk, for keeping off and preventing the Stags and other Deer from debarking and ſpoiling them, and for their more ſpeedy Growth, and greater Security. Their Heads were intirely cut off before Planting, leſt the Winds might ſhade their Bodies, and diſturb their Roots, and the Deer be tempted to ſtrive at biting off

off their tender Shoots. Now why the Aſh was here preferred to the Witch-Elm, I ſuppoſe, was, becauſe the Owner had theſe growing in his adjacent Woods, and not the Witch-Elms: Not but that the Aſh is a very proper Tree to plant for this Purpoſe, and, indeed, near as profitable as the Witch-Elm, on Account of its being an equally valuable Timber, and for its good Bark, that the Deer will likewiſe eat well. But, as the Witch-Elm will grow faſter, into a greater Bulk than the Aſh, and its Bark is thicker and better, I ſhould, for my Part, prefer the Witch-Elm to the Aſh for this Purpoſe. This impenetrable Aſhen Fence may likewiſe be raiſed from Sets planted edge-wiſe, or from the Keys or Seeds of the Aſh, as I have ſhewn in my two *Timber-Tree* Treatiſes.

In my Firſt, I have wrote on the Nature and Improvement of the Aſh.

2dly, Of the Pollard Aſh.

3dly, Of Aſhen Stems.

4thly, Of the Standard Aſh.

And in my Second Book, I have, firſt, ſhewn the Method of propagating the Aſh.

2dly, Of camleted Aſh, not inferior to Maple.

3dly, The Uſe of Aſh.

4thly, Felling Aſh.

5thly, The Value of Aſh.

6thly, The Difference of Aſh.

7thly, When Aſh is to be cut down.

8thly, An Aſh that grew out of a Chimney.

9thly, Of Aſhen Hoops.

10thly, Mr. *Lawſon*'s Account of Aſh.

11thly, A new Invention for the Improvement of Aſh, at Chapter 36.

Now, notwithſtanding what I have wrote on raiſing impenetrable Fences by Evergreens, yet, for making ſuch Fences anſwer to the greateſt Profit, none comes up to the Beech, Witch-Elm, or Aſh,

becauſe the firſt yields Fruit and Wood, and the other two, excellent Lop, Bark, and Timber. Its true, that the Ever-greens are very valuable for Ornament, in affording ſuch a Pleaſure and Shelter as is extreamly agreeable. But the Timber-Tree Fence will grow taller, become a greater Shelter, in keeping off the Power of deſtructive blighting Winds, and a much ſtronger Fence; however, all theſe are ſome of the greateſt Improvements in Nature. How charming a Sight muſt it yield to a Beholder, when he walks through his ſeveral Fields, and views a different Scene of the noble Works of his Creator in each of them, that yearly, with little or no Expence, grows into Profit, as well as Pleaſure! It is no Wonder that the Gentleman, I have beforementioned, preferred this Taſte of Planting; for in this there is no End of Delight, becauſe Trees are every Year new furniſhed with a verdant Appearance, in the ſeveral Stages of their profitable Growth; and this free of that panic Hazard, and too often fatal Conſequence of Loſs, that attend moſt other Endeavours after the Enjoyment of Pleaſures.

Trees, great and ſmall, do in Proportion yield,
At once, both Gain and Pleaſure in the Field,
And Graſs and Flocks with their ſweet Cover ſhield;
Brouſe to the Sheep, and Food to Bees diſpenſe,
Or, woven in Hedges, prove your Corn's Defence.

Of ſix ſeveral Sorts of Drill-Ploughs, &c. —— It is certain, that the Drill-Huſbandry gets daily Ground of the *Virgilian*, or old common Way of Farming, and that with a great deal of Reaſon; for, by its plain and eaſy Uſe, Farmers may obtain the greateſt Crops of Grain, and artificial Graſs, in the cheapeſt Manner poſſible. The late Invention of one or two Sorts has proved ſo beneficial, that

that it has encouraged Artiſts to endeavour the making more; and now there are ſix at leaſt made in various Forms, for plowing and ſowing Grain and artificial Graſs-Seeds, *&c.* in all Sorts of Land, where Drills can be conveniently made; ſo that now both Hill and Vale-Ground of the Sandy, the Chalky, the Gravelly, the Loamy, and even Clay Soils, may be improved by the Drill-Plough and Horſe-break. Accordingly, I furniſh any of them to all Parts: As alſo all Manner of Corn, or Graſs-Seeds, Sets and Seeds of Trees, young Fruit or other Trees, and anſwer Letters, provided Poſtage is paid to my Houſe thirty Miles from *London*, or that the Letter be franked. If therefore any Perſon thinks fit to ſend to me, for any Sort of Plough, I deſire they will let me know the Nature and Situation of their Soil.

CHAP. XVII.

The Copy of a Letter on an important Subject.

How to graze a Piece of Ground, by Sowing artificial Graſs-Seeds, for always.

THIS I ſhall amplify by the following Copies of Letters, *viz.* Sir, 'I have ſold ſeveral 'of your Books of *Farming*; and, in looking over 'ſeveral, I find you furniſh People with Seeds. I 'having a Farm in my Hands (on Account of 'a Tenant's endeavouring to ruin the Land) and 'being quite a Stranger to the Ground in gene-'ral, I deſire the Favour of you to let me know, 'what Sort of Graſs-Seeds will do for the Land, 'and at what Price you will deliver it at *Lon-'don?* The Reaſon, why I want Graſs-Seeds, is, 'becauſe the Tenant has plowed up more by near

'twenty Acres, than the Farm will allow, there 'not being Grazing ſufficient for the Cattle that 'ſuch a Farm requires; and pleaſe to let me 'know the Quantity of Seeds that each Acre will 'require. I can have no other Manure but Lime, 'which lies conveniently; about half the Land 'lies upon the Top of a Hill, and at a ſmall 'Depth about ſix Inches in Places from the Sur-'face in a Bed of Clay, called, *Water-Clay:* The 'other half of the Land, which I deſign for the 'Grazing-Part, lies adjoining to the above, but is '(what I call a *Hill*) of a gentle Sloping, and is a 'little on the Cold-ſide of the Sun, ſhining full on 'the oppoſite Hill. The Land is of a good Soil, 'and a greater Depth from the Clay. As the 'Tenant goes off at *Lady-Day*, I have very little 'Time to turn me in; ſo I deſire the Anſwer by the 'Poſt, which will much oblige

March 13, 1742. *Your humble Servant,*
G. A.

'The Land lies near *Aſhburn*, in *Derbyſhire.*'

My Anſwer to the foregoing Letter. — 'Sir, As 'you deſire, I here anſwer your Letter by the Re-'turn of the Poſt; by which I have to tell you, 'that your Account is imperfect, as not being 'a ſufficient Direction for me to act by: There-'fore pleaſe to anſwer the following Queries: '1*ſt*, What is the Nature of your Surface, whe-'ther it is a Haſle-Mould, a black Loam, or o-'ther Sort of Soil? 2*dly*, Whether the Ground 'lies in a Ridge, that is, whole or half Acre Lands, 'plowed always one Way; or, if it lies plowed 'croſs-wiſe in Broad-lands, or in three or four 'Bout-lands? 3*dly*, Whether it lies wet or dry, 'I mean the lower Ground? 4*thly*, Whether it 'lies in a common Field, or Incloſure? 5*thly*,

'What

' What the laſt Crop of Corn was that grew on
' the Ground you intend to lay down for Graſs-
' ground? *6thly*, Whether the ſame Land is by
' ſeveral Plowings brought into a fine Tilth fit for
' Sowing it with Graſs-Seeds? *7thly*, The Num-
' ber of Acres you would have ſown with Graſs-
' Seeds? Pleaſe to be ſomewhat particular in
' your Anſwers, and I ſhall take Meaſures accord-
' ingly. I have ſent a Gentleman above 200
' Pound Weight of a Sort of Graſs-Seed, that I
' am apt to believe will do exceeding well for your
' Purpoſe; for this Seed will, at once Sowing,
' tho' it be of the artificial Sort, furniſh the
' Ground with a Graſs that any Tenant will not
' ſcruple to pay as much Rent for, as if it was
' natural Graſs; for it will fatten Cattle with
' great Expedition, and, before it is wore out, the
' ſame Ground will, of itſelf, run into a natural
' Graſs, as formerly, from the Roots and Seeds
' of the Ground that was plowed up by your vil-
' lainous Tenant; ſo that you ſhall loſe no Time
' by this Contrivance, if I can be ſo happy as to
' meet with a Parcel of it; for which Purpoſe I
' will in the-mean Time ride about in our Parts,
' (for I have none of my own at preſent) to endea-
' vour the getting of it, for there is none of this
' Sort to be bought in *London*. If I cannot get it,
' I ſhall ſend you what I think is next beſt, but
' the Ground muſt be plowed twice at leaſt, to get
' it fine enough for the Reception of the Seed:
' Therefore you will do well to have it plowed as
' faſt as you can, if it is not fine enough already;
' and, when I ſend the Seed, I ſhall with it ſend
' Directions for its Management. — *Clover-Seed*
' has been this Seaſon from Three-pence Half-
' penny, to Four-pence *per* Pound; but there has
' been ſuch a Call for this, and all other Graſs-
' Seeds, that it has riſen to Five-pence *per* Pound,

' and

‘ and is riſing every Day; ſo that I cannot juſtly
‘ aſcertain the Prices that may govern this and
‘ others, when the Orders come. However, I
‘ ſhall compute them at the preſent Prices as fol-
‘ lows, *viz.* *Clover* at Five-pence *per* Pound, *Tre-*
‘ *foil* in Hull at three Shillings and Six-pence *per*
‘ Buſhel, *Ray-graſs* four Shillings *per* Buſhel. The
‘ Graſs I intend to ſend you at Seven-pence *per*
‘ Pound. Now 12 Pound of Clover-Seed ſows an
‘ Acre of Ground well. Trefoil in Hull, two
‘ Buſhels ſows an Acre. Ray-graſs the ſame
‘ Quantity. And the Graſs-Seeds I intend to
‘ ſend you, one Acre of Land requires at leaſt
‘ 12 Pound Weight of it; but, if there was more
‘ of it ſown on an Acre, it would be better. — Ac-
‘ cording then to the above Computation, you
‘ will partly be a Judge of near the Coſt of Seeds,
‘ in Proportion to the Number of Acres you would
‘ ſow. Therefore, pleaſe to ſend Money for the
‘ ſame by your Carrier, or Correſpondent in *Lon-*
‘ *don*, who, on paying my Bill, ſhall have my Re-
‘ ceipt for the ſame, *March* 20, 1742.

F I N I S.

THE

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THE

THE MODERN HUSBANDMAN,

For the Month of *December*.

CHAP. I.

Of Sowing Wheat *in this Month.*

Of the ill Conſequences incident to the Sowing of Wheat in this Month, and the Way to prevent them. —— In Marſh Ground, in Vale Ridge-lands, and in the ſtiff Clayey Soils of *Middleſex*, they ſeldom or never ſow Wheat-ſeeds in this Month. But, in *Chilturn* Countries, there are Thouſands of Acres ſown with Wheat in *December*, as ſoon as Turneps, or Cole, or Rape-heads, are eaten off: And this more eſpecially, where a Farmer has a Proſpect that Wheat will ſell at a good Price after the next Harveſt, for then many are tempted

to ſow Wheat, though late in the Year, who otherwiſe would not, but ſow the ſame Ground with Barley or other Grain. Yet it concerns every Farmer to avoid ſowing Wheat in this Month, unleſs there is ſuch a Proſpect, or other neceſſitous Reaſons; I ſay, a Neceſſity that may thus happen. In caſe the Turneps, or Rapes, are eaten off, and the Ground is ready to be plowed and ſown with Wheat in dry and open Weather in this Month, then it may encourage the Plowing and Sowing ſuch a Field with Wheat; becauſe, at this Time of Year, this Sort of Weather ſeldom happens, elſe the Sowing of Wheat ought to be deferred till next Month; for this is a ſtanding Rule with many of the experienced and knowing Farmers: That Wheat, ſown in a favourable Seaſon in *January*, will be as forward, as that in *December* before *Chriſtmas*; and this, becauſe the Days increaſe, as well as the Sun's Heat, which forwards the Chipping and Sprouting of the Wheat-ſeed, and brings it under a conſtant Growth; while that ſown in this Month, by the long cold Nights, and the little and rare Heats of the Sun, lies ſtagnating and deadening in the Earth, oftentimes to the Loſs of moſt of the Crop of Wheat; not but that Wheat is often ſown in this Month to good Succeſs, as ſoon as Turneps, Rape, or Cole, are eaten off by the Sheep; but then ſuch Succeſs is owing to the potent Reaſons following: The firſt is, The Dung of the Sheep, if not ſoon plowed in, would be waſted by the Waſh of Rains or Snows, and the Earth get the more clung and ſour. Secondly, The ſooner ſuch Ground is plowed and ſowed, the better Heart it will be in to nouriſh the Grain. Thirdly, This will be the ſafer and more profitably done, if a fine dry open Seaſon happens at this Time; and the Succeſs will be the more, if ſuch mild Weather ſucceeds

the

the Plowing and Sowing of the Wheat-ſeed for ſome Time to forward its Growth. Yet ſuch Succeſs has proved very prejudicial to a Farmer, where it has encouraged him to make a common Practice of ſowing Wheat in this Month, and a long violent Froſt has quickly followed ſuch Sowings; or rather when great Rains have fell preſently after that have chipped and ſprouted the Wheat, and then a long ſevere Froſt quickly followed ſuch wet Weather; ſo as not only to check its firſt Growth, but alſo to kill moſt of it, or at leaſt ſome Part of it. But, notwithſtanding the ſeveral fatal Accidents attending ſowing Wheat in *December*, many *Chilturn* Farmers of late, out of Covetouſneſs to enjoy Plenty of this Golden Grain, do plow and ſow Wheat in this Month where the Soil admits of it, for the ſeveral Reaſons, and after the ſeveral Methods I am going to obſerve.

The ſeveral Ways that ſome Farmers take to ſow Wheat in this Month. —— The Practice of ſowing Wheat in this Month, in different Manners, depends very much on the Nature of the Soil. If it is a gravelly Loam, a ſandy Loam, a chalky Loam, or an intire dry loamy Earth, Wheat-ſeed may poſſibly be ſown in this Month, with a Proſpect of Succeſs: Firſt, by ſowing Wheat after Wheat. Secondly, by ſowing Wheat after Barley. Thirdly, by ſowing Wheat after Clover; and Fourthly, by ſowing Wheat after Turneps, or Rape, *&c.*

Firſt, How a Farmer ſowed Wheat directly after Wheat, to great Advantage. — This was done by a great Farmer, that lived about two Miles diſtant from me, who, by good Plowings and Dungings, in the Year 1739, had got his gravelly and chalky loamy Land in very fine Order, for ſowing it with Wheat, and accordingly ſowed it with this Grain, but to little Purpoſe; for he had

hardly more than his Seed again, becauſe the Earth lay in ſuch a hollow looſe Condition, by ſuch his good Plowings and Dungings, as gave the great hard Froſt that followed Room to make a free Entrance, and kill the Wheat Roots. Now, as there was not a Crop of Wheat ſufficient to exhauſt and ſpend the Vertue of the Dung, as ſoon as Harveſt was over, the Farmer plowed up the ſame Ground; and after he had got it fine enough, by more than one Plowing, he ſowed the ſame late with Wheat again, and the ſecond Crop proved as good as the firſt was bad.

A ſecond Way — Is done by ſome *Chilturn* Farmers, who think their gravelly, or ſandy loamy Soils in ſuch good Order and Heart, as to bear a ſecond Crop of Wheat directly after the firſt: That is, as ſoon as Harveſt is over, they plow ſuch Ground up, and let it lie ſome Time for the Wheat-ſtubble to rot; but this would be better done, if they had firſt raked off the Stubble before Plowing, which would ſave ſome Time in getting the Land fine; for, the more the Stubble, the longer Time it requires to rot; and it generally is in this Month (if the Stubble is large) before it rots enough to give the Farmer Leave to plow and ſow Wheat; and then ſuch Wheat-ſeed may be ſown either in two Bout-lands, in Broad-lands, or in by the Drill-plough, as the Land is more or leſs fine, and afterwards aſſiſted by Top-dreſſing, as I ſhall by and by give an Account of.

Of Sowing Wheat after a Barley-Crop.—— This is oftener done, than ſowing Wheat directly after Wheat, becauſe it is not ſo natural for the Earth to bear the ſame Grain twice together, as when it is ſown with a Change of Seed. Wheat-ſeed is often ſown immediately after Harveſt in Broad-lands, on only one Plowing, and harrowed in, where the Earth is of the light Sort; but, in caſe it is ſtiffer,

ſtiffer, then it is beſt done after two or three Plowings, to get it into a thorough Fineneſs, for ſowing the Seed in two Bout-lands: However, in either of theſe two Forms of Sowing, there is a Fault attending this Undertaking; for, where a full Crop of Barley has been mown off, it generally leaves the Ground ſo hollow, as makes the Wheat-Crop fall down before Harveſt, to the great Damage of the Farmer; and therefore many of late have been ſo judicious, as to roll all ſuch Wheat that has been ſown directly after a Barley-Crop, when it has appeared in a green Blade, in order to faſten the Earth about its Roots, to prevent the Misfortune.

Of Sowing Wheat late after Clover. — This is ſometimes, but rarely, done, by reaſon of the late Feeding that ſome Farmers are neceſſitated to give their Clover-graſs; who, being thus forced to enjoy it as long as poſſible for their Cattle, ſuffer it to grow very late; and then for fear Harrowing in Wheat, on only one Plowing, would expoſe the Seed too much to the Rapine of Field Fowls, and the Deſtruction of very hard long Froſts, they give ſuch Land two or three Plowings, to get it fine enough to plow and ſow Wheat in two Bout-lands; which covers and ſecures it much better from either of theſe Diſaſters, than when it lies in Broad-lands.

Of Sowing Wheat after Turneps, or Rape, or Cole. — Of this I have juſt wrote before, and it is performed by the two ſeveral Ways of ſowing and harrowing in Wheat on one thin Plowing on Broad-lands in this, or in the Months of *January* or *February*, as ſoon as the Turneps, or Cole, or Rape are eaten off by Sheep, or Bullocks; but, if two or more Plowings are given ſuch Land, Wheat may be ſown therein in two Bout-Stitches, or in the Drill Mode, which will anſwer the beſt of any Way where

where the Soil is light enough for the Operation of the Three-wheel, or Pulley-Ploughs, as in the next Place I ſhall give an Account of.

Sowing Wheat in this Month by the Drill-Plough. — As to the Sowing of Wheat by the Drill-Plough, I have in my former Works wrote on it; but here I muſt vary a little, by writing that Wheat may be ſown in Drills after Wheat, Barley, Clover, Turneps, or Rapes, *&c.* to Succeſs; and this by getting the Ground, by ſeveral Plowings, into ſuch a Fineneſs, or Tilth, as will fit it for this Uſe; and which may be done, if the Land is light enough for the Purpoſe, free of large Stones, and lies dry: Then, I ſay, the Drill-Huſbandry will anſwer here better than any other; becauſe the Wheat-ſeed will lie deeper in the Earth, than in the Broad-land Faſhion of Sowing; and this is the more neceſſary to be done at this Time of Year, to preſerve it ſafe againſt the Power of North and Eaſterly Winds and great Froſts, that often kill almoſt whole Crops of Wheat, while it lies in Broad and Bout-lands: In the firſt Shape, as being too ſhallow a Situation; and in the other, as the Wheat lies high expoſed to the Weather, while that ſown in Drills lies warmly and richly ſheltered from theſe Misfortunes. Now, when ſuch Ground is, by ſeveral Plowings with a common Plough, firſt got into a Tilth, or fine Texture of porous Parts, then the Earth is fit for Drilling in Wheat, which may be done (if the Nature of the Soil is proper) by the excellent Pay-Rent three-wheel light Drill-Plough; and which, by being drawn with two Horſes in the making of a new Drill as cloſe as the Plough can well go next to the laſt Drill: As the Wheat-ſeed drops out of the Hopper, the Earth, if it is truly light and fine, will fall in upon the Seed of itſelf, and, cover it, in a very looſe Manner, ſo well as to defend it from

from all Accidents of Winter Weather; and, by the Waſh of Rains on the Sides and Top of the Drills, the Wheat will be nouriſhed in great Perfection, ſtand faſter than when ſown in the common Ways of Sowing, and much better withſtand the violent ſcorching Heats that in ſome Summers laſt a long Time; and therefore, when the Soil is of the ſandy, or other very dry Sort, by this Method of drilling in Wheat-ſeed, it will not only be free from theſe Misfortunes I have mentioned, but alſo from that other too often fatal one, of the Roots of Wheat being uncovered by fierce Winds, that blow away the light Earth from off them, and ſo expoſe them to the Power of Froſts, that kill Thouſands and ten Thouſands of them in very hard Winters. But farther, in caſe the Earth, in which Wheat-ſeed is to be ſown at this Time of Year, is of a more heavy Nature than Sand, Chalk, or Gravel, and yet will admit of this Wheel Drill-Plough's Operation: Then, I ſay, if the Ground cannot be got ſo fine, after a Crop of Wheat, Barley, Clover, Peaſe, Beans, Turneps, or Cole, or Rape, as to fall upon and cover the Seed of itſelf, as ſoon as it is ſown out of the Hopper; if this happens, a light Harrow, or Harrows, may be drawn long-ways over the Drills, and they will cover the Seed with Safety. And, for dreſſing and manuring Wheat ſown in this Month, I ſhall enlarge on the ſame as follows, *viz.*

Of Dreſſing latter ſown Wheat, by Dungs and Manures. — This Month is commonly attended with hard froſty Weather; when it ſo happens, it is in Favour of thoſe Farmers, who have Occaſion to top-dreſs their Wheat; for it is the Caſe of many to be under ſuch a neceſſitous Circumſtance, who had not Dung enough by them, or who could not then buy Manure enough to dreſs their Wheat-

Ground

Ground ſufficiently before Sowing; however, as there were and are ſeveral Opportunities that Farmers have to enrich their Wheat-Crops by Dungs and Manures, I ſhall here mention ſome of them. The firſt Opportunity they have, is by plowing long Dung into the Ground at the firſt Stirree Time, or ſecond Plowing the Land, preparatory for ſowing it with Wheat-ſeed in *September* or *October*: By this early Piece of Huſbandry, ſuch long Dung has Time enough to rot and incorporate with the Earth, by the ſeveral after Plowings, that are neceſſarily performed for bringing it into a fine Tilth; and, indeed, is a good Way to prevent the Cankering of the new ſown Seed, or the Breed of Smut and Pepper-Wheat, Diſeaſes which are often occaſioned by plowing in Dung juſt before the Wheat-ſeed is ſown. The Second is by the Fold, which is allowed to be the beſt of Dreſſing for a Wheat-Crop, either in *Chilturn* or Vale-lands; and, as it is an univerſal one, happy are they who live near a large Common for Feeding their Flocks, free of that Fatigue, which many are obliged to ſuffer, who live one or two Miles diſtant from a Common; as I have known ſome to do, and yet are forced to drive their Sheep every Day to it. In this Caſe, their Flocks hardly receive half the Benefit of that which grazes near Home: However, to ſupply this Defect, a right *Chilturn* Farmer will always have Clover or other artificial Graſs enough growing in his incloſed Fields, to ſupply, in a great Meaſure, this Sufficiency, and give his Sheep a Belly-full before they are folded; for the poor Feeding of folded Sheep is next to Drawing an empty Dung-cart over the Ground. Now the Happineſs of a good Flock of Weather-Sheep gives the Farmer not only an Opportunity of dunging his Land in the early Part of the Summer, but alſo as a Top-dreſſing in the latter Part

of

of it, even after the Wheat is ſown, either in Broad-lands, Ridge-lands, Bout-lands, or in the Drill-way; and which has this peculiar Quality belonging to it, that once Folding now, or in the latter Part, is worth twice Folding in the former Part of the Summer: Therefore, where Wheat is ſown in this Month, and the Weather is not too wet or ſnowy, and the Ground will admit of it, a Flock of Sheep, with a Rack of Wheat, or Bean, Pea, or Thetch-Straw, or Hay, will do great Service, by feeding them in the Fold for their more plentiful Dunging; and keeping them in Health: But Barley, or Oat-ſtraw, in particular, is to be avoided for this Purpoſe; becauſe theſe are apt to ſhed their Kernels, and ſtain the Wheat, by their taking Root among it; and then it would be the Farmer's great Loſs, who muſt ſell a Sack of ſuch ſtained Wheat, for a Shilling or two leſs, than if it was clear from ſuch Soil. In ſhort, by thus Folding on new-ſown Wheat, it will cauſe it, in a great Degree, to reſiſt Winds and Wets, and very much preſerve it againſt that Loſs, which generally happens to the Farmer, when his Wheat falls down, and is laid before Harveſt; force the Worms to quit their Living near the Surface, and Knawing the Roots of Wheat; and, at the ſame Time, by the Tread of the Sheep, it will be ſo faſtened and cloſed, that the Field-Fowls cannot come at it to devour the Seed, nor the Froſts to damage it. The third Way is done by rotten, ſhort, Stable-dung, plowed into the Ground at the very laſt Plowing of all, when the Wheat-Seed is ſown; this is a good Way in one Reſpect, eſpecially where the Wheat is ſown in two, three, or four Bout-lands; becauſe, by this Way of Plowing and Sowing, the Plough mixes the Dung and lays it ſo mixed with the Earth, in a very regular Manner, to the great Advantage of the Seed's Growth, which here is kept warm by the Dung,

and very much defended againſt the Damage of great Winds, hard Froſts, and violent Rains: But then there is this Inconvenience attending it, the Dung, which naturally is of a hot and mouldy Nature, is apt to heat, canker, and ſpoil or damage the Wheat-Seed, to the Breeding of Smutty or Pepper-Wheat: Yet, as prejudicial as this is, it is more practiſed by the *Hertfordſhire* Farmers, than any other I ever met with: Accordingly, I believe, I may venture to affirm it for a Truth, that we, in the Weſtern Parts of *Hertfordſhire*, ſuffer as much, or more, than Farmers do in other Counties, by this old pernicious Cuſtom of laying on our rotten Dung, juſt before we plow and ſow our Ground with Wheat. And this, in a great Meaſure, I prove, by what I have been an Eye-witneſs of, in other Parts of *England*. In *Kent* and *Eſſex*, to avoid this ill Piece of Huſbandry, they mix their Dung with Mould, and ſmall Chalk, or Lime, early in the Summer, againſt Wheat-Seaſon; which gives them an Opportunity of turning their one great Heap, and mixing its fertile Ingredients together more than once; ſo that, in Time, they become incorporated into fine, minute Parts, free from that mouldy Heat, which, as I ſaid, Dung alone is ſubject to. And, thus, they not only prevent theſe Diſaſters, but make ſuch Manure go a great Way further in the fertiliſing their Wheat-Crop, becauſe it mixes with almoſt all Parts of the Earth. Others think even this too great a Hazard, and fear, if they lay their Dung on their Wheat-land the ſame Year they ſow it, that it will heat and canker their Wheat-Seed, to the Breeding of Smutty and Pepper-Wheat. And therefore they make a Compoſt or great Heap with ſeveral Materials, which they lay on their Land, when they ſow it with Oats, Barley, or Beans; ſo that, in the following Year, when they ſow the ſame Ground with Wheat, they are pretty ſure of being de-

livered from these two Misfortunes. This they do in some Parts of *Essex*, near the Town of *Barly*, in that Part of *Hertfordshire*, next *Essex*, and in several other Places. In *Norfolk*, *Surry*, &c. they lime their Wheat-land; in *Hampshire*, *Cheshire*, &c. they marle it; in *Wiltshire*, &c. they dress their Wheat-ground with a white Manure; in *Cambridgeshire*, &c. they lay on Oil-cake Powder; and in some Parts of *Hertfordshire*, they make use of Soot, Horn-shavings, Rags, Sheeps-trotters, Cows and Hogs Hair and Hooves, *&c.* striving, as much as they can, to dress their Wheat-ground with any Thing but Dung, and laying that on their Meadow, or Barley, Oat, or Bean-land: By which they avoid the great Damage that naked Dung often brings their Wheat-crop under. The fourth Way is done, by laying long Dung over Wheat, in last or this Month. This Practice, as I said before, is chiefly done through Necessity, when the Farmer has not had Dung enough by him in the former Part of the Year to dress his Wheat-land with, and therefore is glad to do it now, with that he makes by his Stable, his Hog-stye, or his Cow-house. If by the first, it highly concerns his Interest, to make his Stable-dung, as I have observed, from the Feed of Wheat, Bean, or Pea-straw, or Hay, and lay it under Cover, that the Rains may not wash out its Vertue; and then, when frosty Weather happens, that he can draw it on, and spread it over his Wheat, it will do great Service. My Way, in this Respect of Management, is thus: I lay such Stable-dung, both long and short together, under Cover, as it is carried out of my Stable; and, as I increase the Heap, my Boy throws the Chamber-pot over every Part of it, which very much helps to rot and enrich it, and cause it to do great Service to the Wheat-crop at this Time of Year: But, to this great Conveniency, I must tack the Account of an Inconveniency

veniency attending the Laying on of long Dung on Wheat; and that is, that ſuch long Dung ſhould never be laid on Wheat after this Month; becauſe, by the Length of the Straw, it will be apt to ſmother the young Blades of the Wheat, and thus do more Harm than Good. I ſhould have ſaid, that the Blades of Wheat, in *January*, and afterwards, commonly get ſuch a Length and Bigneſs, as to cover moſt, or all the Ground; and then, if ſuch long Dung is laid over them, it will be apt to make them look yellow, and perhaps kill many of them; But, by laying it on in this Month, in the Infant-growth of the Wheat, it will not only greatly nouriſh it, by the Help of Rains, which will waſh out the fertile Quality of the Dung and Stale, but afterwards the Straw part will keep the Wheat warm, and ſhelter it againſt the North and Eaſt Winds, which ſometimes kill or cripple Thouſands of Acres of this golden Vegetable, and alſo enable it to reſiſt the Chill of Waters, that, in many flat, ſtiff Soils, are very apt to damage the Wheat-crop. Laſtly, there is an Opportunity, at this Time of Year, to dreſs Wheat-Crops by the Hand, in ſowing over them Soot, Peat-aſhes, Oil-cake Powder, or Cows or Hogs-hair. *&c.* But, as it is rather too ſoon to do it in this Month, I ſhall defer a further Diſcourſing on them till next.

How a latter-ſown Wheat-Crop was almoſt ſpoiled by Crows and Rooks, and how to prevent the like Misfortune.— This is the worſt Misfortune that attends Sowing Wheat late, for then theſe knowing Creatures, that act as ſo many watchful Enemies againſt the Farmer's Intereſt, ſeldom or never fail of making any very latter-ſown Corn their chief Place of Rendevouz. And, as the black Tribe of Crows, and Rooks, are the moſt numerous, and beſt furniſhed with the ſtrongeſt Beaks, they moſt diligently trace over the Ground, and, in their flocking Marches, leave

leave hardly any Place unexamined and free, where they have full Time and Liberty of executing their Rapine, to the Deſtruction, ſometimes, of a ſmall Field of Grain: Now, no Country ſuffers, on this Account, ſo much as the incloſed *Chilturn*; becauſe, by Means of Clover, Cole, and Turnep-Crops, our Ground is made the moſt liable to be ſown late with Wheat, Barley, *&c.* and then, notwithſtanding all our Inventions of ſowing Wheat, in the ſecureſt Manner, yet it cannot be ſaid to be intirely ſafe, againſt this Sort of Field-Cormorants; becauſe, tho' it may be ſown in two, or more Bout-lands, or ſowed and plowed in Under-thoroughs, or in the Drill-Mode, yet what theſe Invaders cannot come at preſently after Sowing-Time, they will make a ſecond and fierce Effort, at the firſt Sprouting of the Wheat, whoſe Blades ſerve, as ſo many Marks, or Signs, to direct theſe winged Pioniers, to ſtock or peck up the Kernel, in its Embryo of Growth; for then, as it is not yet all ſpent in Root, the Crow and Rook meet with a ſweet, tender, and larger Subſiſtence from it, than when the Corn is juſt new-ſown, as having now the Increaſe of the Blade added to it. But there is ſtill another Reaſon for ſowing Wheat late, as may appear by the following Caſe:— A Gravelly incloſed Field was ſown with Wheat early in *November*, becauſe this warm dry Soil is apt to cauſe the Grain to grow rank too ſoon, if ſown in *September*, or *October*; and becauſe, the leſs Time the Dung lies in this Soil, the more the Wheat-crop will be nouriſhed; for as a dry huſky Gravel is the moſt lean and hungry Soil of all others, if Dung is ſuffered to lie as long here, as it uſually does in the ſtiffer Sort, the Wheat will complain for Want of a fertile Aſſiſtance before Harveſt. Now this new-ſown Field of Wheat ſuffered much by the Crows and Rooks, becauſe it was thus ſown late; but, as the Seed was plowed in, they could not

not come at enough of it to ſpoil the Crop in any great Degree; however, the Weather happening afterwards in their Favour, by a three Days ſharp Froſt in this Month, the Ground became ſo looſened by it at the next Thaw, as to give theſe Fowls an Invitation to come and peck up the new ſprouted Kernels. Accordingly, about the eighteenth Day of *December*, great Numbers of them fell to work, and, being directed to their Prey by the ſprouting Blades of the Wheat, they ſtruck in their Bills, and, by the ſtirring Motion of them to the right and left, they ſo opened and parted the Earth, as to come at and pull up the new opened Kernel; and thus they tore up the Seed, leaving many of the broken off Blades, about two Inches long, behind them, on the Surface of the Earth, by which they demoliſhed great Part of the Crop; and the more as this Field lay at a great Diſtance from the Farmer's Houſe, and he was not armed with that Knowledge and Diligence, that ſome are Maſters of, for he only burnt a little Straw here and there about the Ground; whereas, had he ſhot ſome for a dead Scare-crow, or catched ſome, by twiſting two or three ſmall Threads together, and tied crooked Pins to their Ends, and faſtened ſome Peaſe on them; I ſay, if he had laid a good Number of theſe Snares about the ſame Field in due Time, fixed to Bits of Sticks thruſt into the Ground, he very probably might have taken as many of theſe his Enemies, as would have ſerved as ſo many Beacons, to fright and keep off all others of their Fraternity. I knew an old *Chilturn* Farmer, who lived near *Dagnal*, in *Hertfordſhire*, follow this Practice, with ſuch Succeſs, that he prevented a great deal of Damage, that the Crows and Rooks would otherwiſe have done to his Corn-Crops: But as I know two other Ways, that would prove more efficacious than theſe, if rightly managed,

naged, I intend to publiſh them in *March* next, when Barley, *&c.* are to be ſown.

The Way that a Chilturn *Farmer took to enrich his new-ſown Wheat.*— His Wheat was ſown in a chalky Soil of the looſer Sort, which he enriched by Winter-folding his Weather-Sheep on the ſame, after this Manner: Having large Crops of Turneps growing in his incloſed Fields at *Dagnal*, that lie Part in *Buckinghamſhire*, and Part in *Bedfordſhire*, he fed his Weather-Sheep on them in the Day-time, and at Night folded them on his Wheat. If the Seaſon was dry, he would fill a moveable Rack with Straw, that ſtood ready placed on the Wheat. If it was baſhy, wettiſh Weather, he then would fill it with Hay, and thus carry on Folding all the Winter, except when very great Rains happened, or when Snows fell; and, even then, he would not loſe the Benefit of the Sheeps Dung and Stale, for in this Caſe, he would confine them in a Straw-yard, and feed them there with Pea, Barley, or Oat-Straw, out of a Rack; ſo that he made it his particular Care to enjoy the Benefit of this excellent Dung all the Winter in one Place or other, and indeed I may ſay, all the Year. Thus he enriched his Wheat-crop, ſown in a chalky, looſe Soil, the beſt Way of all others, becauſe here the Sheep, by their Tread, do the great Service in trampling on and preſſing down the hollow Earth on the Wheat-Roots, ſo as to make their Stalks ſtand faſt hereafter, againſt the Force of Winds and great Rains, and againſt the violent Heat and Drought of Summer, to the no little Improvement of ſuch a Wheat-crop. But here it may be aſked, What Dreſſing will the Turnep-land have, if the Sheeps Dung is thus carried off in Nights. To this, I anſwer, that, for obtaining a full Turnep-crop, we ſeldom fail of dreſſing the Ground firſt by Dung, or by the Fold; and, as it thus firſt dreſſed, the Dung and Stale of the Sheep, while they

feed

feed and remain among them all the Day, is ſufficient to fertiliſe the Ground for a Wheat or Barley-crop. But our common Cuſtom is, to dreſs ſuch Ground again, when we ſet on it either a Wheat or Barley-crop; and this we do by laying on rotten Dung, or Horn-ſhavings, or Rags, *&c.* juſt before we plow and ſow either of theſe Grains; or elſe throw Soot over the ſame, after the green Blade has appeared, or we run the Fold on it. By ſome of theſe Materials, we generally improve either a Wheat or Barley-Crop, that may be ſown directly after the Turneps are eaten off. But, if there was no ſuch additional Dreſſing beſtowed on the Land after a full Turnep-crop, it is a great Chance if a good Crop of Wheat or Barley does not ſucceed: And thus a Wheat or Barley-crop may be much improved, when ſown either in the Broad-land, or in the Drill-mode. If it is to be done in the laſt Form, ſuch Turnep-ground ſhould be plowed, twice at leaſt, and harrowed ſeveral Times well, for preparing and getting it into a proper Fineneſs for ſuch Drill-ſowing of Wheat or Barley, by the Three-wheel light Plough.

When, and why, Wheat is better ſome Years in Vales, than others.—In this Month, 1742, the Wheat-crop, in Vales, made as fine an Appearance, I believe, as ever was known. The Reaſon was this; for theſe two or three Summers laſt paſt, we have enjoyed long Seaſons of very dry Weather, which gave the Farmer ſuch a favourable Opportunity of plowing his Ground, both at Fallow, Stirree, and Sowing-Time, that he did more Good to it with one Plowing, than two or three would have done in very wet Weather, whereby he brought it into a moſt fine ſweet Condition of Tilth; two Qualifications that often prove more advantageous to the Farmer's Intereſt, than a ſorry Dreſſing: That is, if ten Loads of Dung were laid on one Acre of Land, and plowed

ed into it at Fallow, or at the firſt Stirree-time; I ſay, this Quantity of Dreſſing ſo plowed in a dry Seaſon; and if ſuch a dry Summer ſucceeds, that he can plow and ſow his Wheat in ſuch dry Weather, it will do him more Service, than double the Quantity, or more, laid on and plowed in, in wet Weather, if ſuch a wet Summer follows that he is obliged afterwards to plow and ſow his Wheat in, at a wettiſh Time. But there is another main Reaſon that confirms what I here write; and that is, by ſuch ſeveral Operations of the Plough in dry Weather, for preparing Vale Ridge-lands to receive Wheat-ſeed in the beſt Perfection, in order for producing a full Crop of this King of Grain: The Thiſtle, the Arch-Enemy of Vale Wheat-Crops, is hereby kept under, and prevented doing that ruinous Harm, which, in many Places of theſe low ſtiff Soils, in wet Seaſons proves, if not fatal, yet of great Damage, to ſuch Wheat Crops.

Wheat Sown after a Turnep Crop at Giles's Chaffon, *near* Amerſham, *in* Bucks. — Here the Soil is for the moſt Part a gravelly Sort, and therefore they ſow it with Wheat accordingly in ſeveral Shapes; their particular Ways of doing it, at other Times in the Year, I ſhall not here mention, becauſe I am now confined to their doing it after a Turnep-Crop. As ſoon as the Turneps are eaten clean off, they give their Ground only one ſingle Plowing, and ſow their Wheat-ſeed in half a Quantity Broad-caſt, which they plow in with their Two-wheel Wood-chip-plough very ſhallow, on Purpoſe that the Wheat-roots ſhould reach the Dung and the Stale of the Sheep that they left in and on the Surface; then on the rough Earth, as the Plough left it, they ſow the other half Quantity of Wheat-ſeed, and harrow it in. By this Management great Part of the Seed is ſecured againſt the Beaks of Field-fowls, which, at this Time of

Year, are very ravenous, and will boldly hazard their Lives to get at any new-ſown Wheat, for want of other Opportunities of living better. And, as *March* is the moſt dangerous Month in the whole Year for killing Wheat, I have a new Method to publiſh, that will, for a Trifle Charge and Trouble, prevent it, and not only prevent it, but greatly improve the Wheat in its after Growth.

CHAP. II.

Of Salt-Petre.

AN Account of the infinite Advantage that muſt neceſſarily accrue to this Nation, if Salt-Petre *can be made in every Town and Village for a Trifle Charge, according to Dr.* Allen's *Propoſal.* —— In the *Northampton-Mercury*, or *Weekly News-Paper*, bearing Date the 7th of *March* 1742-3, there is an Advertiſement inſerted in the following Words: 'Good Judges who have ſeen and read the Reverend Mr. *Thomas Allen*'s compleat Body of univerſal Hiſtory, Theology, and Chronology, in Manuſcript, beſides thoſe who have given it a public Character before it had its *Imprimatur* from *Oxford*, dated *November* 19, 1742, do eſteem it a Maſter-piece in its Kind, and well worthy the Encouragement of the Public, whoſe Pleaſure and Profit it equally conſults, and bids fair for requiting the Monthly Charge of one Shilling for obtaining the ſame from that Univerſity-preſs, if it were only for their Childrens Sake, and thoſe wiſe and orthodox Tenets it conveys by Word and Examples, for the well Forming and Principling the growing Generation in the Fear and Love of God.'

N. B.

N. B. His Secret of making Salt-Petre in every Town and Village of *England*, at little or no Expence, he deſigns, if encouraged, to offer ſoon to the Public; which will not only pay his Subſcribers well for their Civility, but alſo ſave this Nation many Thouſand Pounds annually, which are ſent to *China* and the *Eaſt-Indies* for the Purchaſe of that Commodity.

Obſervations on the Reverend Mr. Allen's *Propoſal to find Nitre, or Salt-Petre.* — This Gentleman, who is now Miniſter of *Kettering* in *Northamptonſhire*, I am but barely acquainted with, as having never been in his Company above twice; but, as I know him chiefly by his Works to be a moſt ingenious deſerving Gentleman, I have here, without his Privity or Conſent, re-publiſhed his Advertiſement, to apprize the World of the great Secret he offers to diſcover, if encouraged: A Secret that, when diſcloſed, will in Courſe be of prodigious Advantage to all Farmers in particular; for, if they can obtain this choice Expedient, at ſo cheap a Rate as Mr. *Allen* intimates, they will be enabled to get the largeſt Crops of Grain and Graſs, *&c.* by Means of mixing the Salt-Petre in Powder with Peat or other Aſhes, Oil-Cake-powder, Malt-duſt, or any other Manure, and thereby make the moſt fertile Compoſition that can be laid on Land, and may be juſtly called *a rich Mine above Ground.* But to give a farther large Account of Salt-Petre in a little Room, take what Mr. *Houghton* writes of it, as follows, *viz.* —— By the Account *Thomas Henſhaw*, Eſq; has given of this he ſays, Chryſtals of it are often found in *Africa* and *India*; and that he himſelf has drawn very good Rock-Petre from the *Stiria* hanging like Jewels in arched Cellars and Vaults: He alſo thinks the Air to be full, and has often extracted it from the Rain, and eſpecially Dew,

altho' but in ſmall Quantities, for the Rains quickly waſh it away; and the chiefeſt Places are thoſe covered from Rain, from which he adviſes Dunghills to be ſo ordered; and obſerves, let the Earth be never ſo good, if it be laid on Brick or Board, the Petre will not be ſo rich. Any Place, thus qualified, will have Petre; and the Workman knows when it is there, by laying a little of the Earth on the End of his Tongue; and, if the Ground be good, it continues rich to ſix, eight, or ten Feet. After the Petre is extracted, if the Earth be laid in again wet, it will be twenty Years before Plenty comes; but, if well dried, it will come in twelve or fourteen Years; and, if Pigeons Dung, *&c.* be mingled with it, it will be fit to dig again in five or ſix Years; Water throwed on it will ſink the Petre; and he is informed, that Soap-ſuds will quite deſtroy it.

CHAP. III.

Of Plowing.

Plowing Chilturn *Lands for Barley.* —— In the Weſtern Part of *Hertfordſhire*, which is a *Chilturn*, or hilly incloſed Country, we ſeldom or never make a Fallow for Barley, becauſe we ſow commonly this Grain after Wheat or Turneps; and therefore, when we deſign to ſow a Wheat-ſtubble with Barley, we begin to plow it up, as ſoon as we have made an End of ſowing our Wheat; and the firſt Stirree or ſecond Plowing is generally performed in this or next Month, to prepare the Earth for ſowing it with Barley in *March* following; and this with good Reaſon, for, if the Ground is not in a very looſe Condition, and of a right Nature,

ture, Barley will not thrive in it; becauſe it has weaker Roots than either Wheat, Oats, Peaſe, or Beans, which render them uncapable of penetrating Clays and hard Earths. It is ſomewhat on this Account alſo, that Farmers forbear Sowing Barley ſooner than the latter End of *March*, or the Beginning of *April*, leſt even their gravelly Soil ſhould be baſhed and bound by Brooking or great Rains, that frequently happen in *February*, and ſometimes after, to the Damage of the Barley-Crop ſown in that Time. Hence it is, that, in caſe ſuch heavy Rains fall in two or three Days after the Sowing of Barley at any Time, ſome Farmers will draw the Harrows over the ſame Ground to looſen the Surface, and give its Roots an eaſy Room to ſhoot and ſpread; ſo that three Times Plowing in all is but meerly requiſite towards the obtaining a full Crop of this uſeful Grain. And now as the firſt Stirree, or ſecond Plowing, is to be done in this or next Month, if the Weather permits, it is excellent Huſbandry to lay fifteen Cart-loads of Dung, or better twenty, over each Acre of Ground, regularly ſpread and plowed in. If it is a light Soil, it may be well plowed in Broad-lands: If a *Chilturn* ſtiff Soil, in ſingle Bouts. By either of theſe Ways, the Dung will be ſo well mixed and incorporated with the Earth againſt Barley-Seaſon, as to bring it into a looſe fine Condition, and thereby render it more capable of receiving the Benefit of nitrous Airs, Snows, and Rains, to the great Improvement of ſuch Land; and much more ſo, when it lies in that beſt Form of others (ſingle Bouts); for, in this Poſition, the top Earth lies about fifteen Inches from the Bottom of each Thorough or Furrow; and as each ſingle Bout or Ridge is near twenty Inches thick at Bottom, and about four at Top, a hard Froſt can penetrate through the greateſt Part of this laid up Earth,

kill

kill thoſe Weeds whoſe Roots the Froſt can thus come at, ſweeten the Ground in the beſt Manner poſſible, and preſerve it in the drieſt Condition that can be done by a Plough. It is this Mode of Plowing that is very much wanted in many Places, to ſhorten and ſweeten their ſtiff wet Soils in the moſt expeditious Manner, becauſe Thouſands know not the Art of performing it: I have heard an ingenious Gentleman lament the ignorant Perverſeneſs of his neighbouring Farmers, who live in *Middleſex*, in that they would not be brought into the Practice of Plowing their long Low-lands in ſingle Bouts, for the better killing of their deſtructive Couch-graſs, and other Weeds, and bringing their Ground into a fine Tilth and Sweetneſs, much ſooner than their common Way of Plowing it, and laying it up in three or four Bout-lands. By this all *Chilturn* ſtiff Soils may be reduced into a fine pulveriſed Tilth, and be made ready for receiving and nouriſhing the minute Seeds of Clover, and other artificial Graſſes that may be ſown among Barley; becauſe, by bouting the ſame Land a ſecond Time, off the laſt Bouts, it breaks the Bottom and all the Ground in the moſt ample Manner: Or, the ſame may, for a third Plowing, be back-bouted, which will alſo ſhatter or break all the Ground: Or, inſtead thereof, it may be only thoroughed down, and then harrowed or plowed a-croſs into Broad-lands, for ſowing and harrowing in Barley. Thus we manage many of our incloſed Fields, that are of the ſtiff Sort of Earths, after a Crop of Wheat; and then we call ſuch a Barley-Crop, *a Hitch-Crop*, as not having a regular Tilth made for the ſame. By theſe ſeveral Ways of Plowing, and laying up Land in deep ſharp ſingle Bouts, it is not only prepared for ſowing it with Barley and Graſs-Seeds, in the Broad-land Faſhion, but

but alſo for ſowing it with Barley in the Drill-Method: Or for Sowing in the ſame Turneps, Weld, Cole, or Rape-ſeed, *French*-wheat, *St. Foyne*-ſeed, or the Seeds of Trees, *&c.* after the Drill-Mode; and which is indeed the very beſt Mode of all others, for fertiliſing and propagating Crops of Vegetables, in the cheapeſt Manner that poſſibly can be done, where the Soil and Situation will admit of it, as many Thouſand Acres will, that were never yet employed in the Drill-Huſbandry. But as I have in laſt Month given a Hint of the vaſt Profit that an Honourable Gentleman acquired far in the North, by purchaſing a large Tract of barren Ground at a very low Price, and by the new Drill-way of Plowing and Sowing, *&c.* had ſo improved it, as to make it as rich a Soil, as any in the adjacent Country: I hope my Endeavours to further the Knowledge of this moſt excellent Management will not prove ineffectual; and that they may not, but, on the contrary, have their due Effect on the Minds of my Readers, whoſe Purpoſe the Drill-Huſbandry may ſuit, I ſhall by and by, in this Book, inſert the Copy of a Letter from an eminent ingenious Planter in one of the *American* Colonies, who, by only reading my Monthly Book for *May*, became ſo enamoured with my Deſcription of the three-wheel Drill-plough, or Horſe-break, that he ſent over an Order to Mr. *Jonathan Forward*, Merchant, in *Philpot-Lane*, near *Billingſgate*, to pay me my Price for them; and accordingly they were both made and delivered to him in *January* 1742, to be by him ſent to his Correſpondent. But to the Matter in Hand, of preparing Ground for Sowing it with Barley in the *Chilturn* Country; I am here further to obſerve, that ſuch Preparation by Plowing and Dunging is more than ordinary neceſſary, where a ſtiff Loam is to be ſown with Barley; becauſe,

becauſe, by ſuch Preparation, the Earth is brought into a fine crumbling Condition; and ſo fine it ought to be, where it is to be ſown by the Drill-Plough, that the Mould ſhould fall into the Drill upon the Seed of itſelf; which is certainly the moſt natural Way of all others to cover the Seed, by Reaſon the Earth in this Manner lies ſo ſoft and looſe, as to give the Barley-ſprout an eaſy Paſſage into the Air, and therefore is far preferable to the uſual Way of Drawing a Harrow long-ways over the Drill to cover the Seed with Mould, that generally diſturbs it, and removes Part of it from its firſt regular Diſtance of lying, as it dropped out of the Hopper, and at the ſame Time rakes the Earth over the Seed, and leaves it in an uneven Thickneſs. It was on the 30th Day of *December* 1742, that I plowed in long Stable-Dung into my Ground, that I deſign to ſow with Barley in the following Manner: As ſoon as I could after Harveſt, I plowed up a Wheat-ſtubble into Broad-lands as it lay before; and after it had lain ſo to rot, till late in the Month, in a froſty Time, I carried out my Stable-Dung, and ſpread it all over the Ground, and plowed it in, in the Form of ſharp ſingle Bouts, which directly mixed it with the Earth; and as it thus lies in a high Poſition of Bouts, if hard Froſts happen ſome Time together, I hope Time and them will ſhorten the Straw-Part; ſo that by bouting the ſame Land down hereafter, and plowing it again into Broad-lands when I ſow it with Barley and Clover-ſeed, I may come by a good Crop of both.

The Method a Farmer took to prepare and enrich his Land for Sowing Barley-Seed. — This *Chilturn* Farmer occupied a large Farm, whoſe incloſed Fields conſiſted of gravelly and chalky Loams; which to improve in a very high Manner, his uſual Way

was

was to carry up to *London*, three or four Times a Year, a Waggon-load containing ſixteen Sacks each Load of Wheat-flour, only to defray the Charge of travelling and bringing down, what we in *Hertfordſhire* call, *London* Dreſſing; that is, Soot, or Horn-Shavings, for dreſſing his Wheat or Barley-Crops before and in the Spring Time. His Horn-Shavings he bought in *Petticoat-Lane*, near *Whitechappel*, where he filled his Quarter Sacks with them for eleven or fourteen Shillings a Sack each. If he gave the firſt Price, it was for the larger Sort of Shavings; if the latter, it was for the ſmaller or Ink-horn Sort, as they are here called. Now theſe Shavings he plows into his Ground in Winter to mix with, and lie and rot in the Earth againſt Barley-Seaſon, which the Shavings will do in a better Manner, if great Rains frequently fall in the mean Time; for, by their being thus often wetted, they will heat, ſmoak, and ſtink very much, if they were ſown pretty thick. Thus he makes Uſe of theſe Shavings, when he plows his Wheat-ſtubble up, to ſow the ſame Ground with Barley, and ſometimes for ſowing his Barley-ſtubble with Wheat, *&c.* But here an Objection may ariſe, that ſuch hot, dry, gravelly Ground, is not ſo proper to be dreſſed with Horn-Shavings, as the colder and ſtiffer Soils are. It is true, that they are moſt natural for the latter Sort of Land, becauſe, by their hot and dry Nature, they will warm ſuch cold ſtiff Ground, keep it hollow, and help to preſerve it from the Damage of Chills by too much wet Weather, which ſuch Soils are very ſubject to. Yet as a hungry Gravel is a Sort of Land that often ſpoils great Quantities of the new-ſown Seed of Corn, when great Rains fall preſently after Sowing, by binding and cloſing the Surface ſo, that many of the tender Blades of Wheat or Barley cannot get through it; it is a proper Ma-

nure to prevent this Misfortune, and at the ſame Time, by its tough and ſpungy Parts, it will continue and remain a feeding Dreſſing to ſuch a lean voracious Soil, much longer than either Stubble or any other Dung; and alſo, by receiving and retaining of Waters, the Shavings will keep ſuch Land in a moiſt Condition in the drieſt hotteſt Seaſons; a Benefit of no ſmall Importance to Barley-Crops, becauſe, as this Grain is ſown late in the Spring, dry Weather often ſucceeds ſo long, as to prove fatal to many Crops, by hindering its ſhooting into large full Ears, and cauſing ſuch Crops to conſiſt at Mowing-Time of two or three Ripeneſſes, which in Courſe will make ſuch bad Malt, as to deceive both the Buyer and Brewer of it.

Where and how ſome Farmers uſed to dreſs their Ground with Horn-Shavings, preparatory for ſowing it with Barley in March; *and how they have of late left much of this good Huſbandry off, becauſe the Perſon ſhould not enjoy ſo much of their Corn-Tythe as he formerly did.* When I was at *Hertford* Aſſizes on the Jury in 1741, I there met with a Farmer, who ſaid he lived not a great Way off *Bennington*, in *Hertfordſhire*, who aſſured me, that, in a Pariſh near him, the Generality of the Farmers bought great Quantities of Horn-Shavings in *London* every Year, and plowed them in, when they laid up their heavy Loams in laſt or this Month againſt Barley Seaſon. Another Way, he ſaid, that they ſometimes practiſed, was to plow theſe Shavings into the Ground, juſt before they ſowed their Barley; and then he, that had a full Pocket, would dreſs each Acre with four Quarter Sacks of this Manure, which is a greater Quantity than I ever knew uſed before; for in our Parts he, that employs three Quarter Sacks this Way on every Acre, is thought to lay a great deal on indeed: But there is this to be ſaid in Behalf of theſe Farmers, who

who live in or about *Bennington*, that lies about twenty-four Miles from *London*, that they enjoy the great Conveniency of having ſuch Goods brought to them in a moſt cheap Manner by the Water Carriage of *Ware* River, while we in the Weſtern Parts of *Herefordſhire* are forced to pay conſiderably for their Carriage by Waggons from *London*, at thirty Miles Diſtance; but that of late, he ſaid, they neglected to dreſs their Plowed-Ground as much as they uſed to do, becauſe the Parſon of the Pariſh had affronted them very much, by ſpending his Money out of it, *&c.* And this, he ſaid, they did, in order to deprive him of that large Quantity of Tythe-Corn which he formerly gathered when he better pleaſed them, and when they did not grudge the Expence of dreſſing their Land in the compleateſt Manner. — Here is an Example of exalted Wickedneſs: What! Muſt not a Gentleman enjoy that Liberty and Property that the meaneſt Peaſant has a Right to, and who would think it a Sort of Exile to be confined to lay out his Money in only one Pariſh. Theſe Farmers themſelves, I doubt not, would loudly proclaim their Hardſhip, were they forced to do the like. They ought to think themſelves very happy in the Enjoyment of a Reſident Miniſter, that many Pariſhes at this Time would be glad of, and do all they can to pleaſure him. I know four or five Pariſhes almoſt joining to each other, and every one of them has a different Miniſter belonging to it; theſe People know the Value of a Reſident Miniſter by the Want of him; for I heard one Farmer ſay, their Women ſeldom ever went to Church, becauſe in the Morning they ſtaid at Home to dreſs Dinner, and in the Afternoon of a *Sunday* the Church-Doors were ſhut up, by Reaſon the Miniſter officiated

in two Pariſhes the ſame Day. In ſhort, it is a deplorable Caſe to ſee Farmers Children and Servants in particular, by this Means, tempted to ſeek out Opportunities of ſpending their Time on a *Sunday*, in playing and running into thoſe Commiſſions of Evil, that may, perhaps, by Cuſtom lead them into Ruin, for Want of an Opportunity of employing the ſame Time better at Church.

CHAP. IV.

The ill Husbandry of ſome Vale-Farmers.

HOW, *by the old Way of Farming, ſeveral Farmers, near* Newton *in* Buckinghamſhire, *ſow their Ridge-lands but once in three Years.*— Here I undertake to give an Account of one Piece of the old diſadvantageous *Virgilian* Way of Farming, in theſe Parts, and the new improved Drill-way, that may be here put in Practice in their ſtiff, low, Vale Grounds. About this Village, or Town of *Newton*, their Lands lie naturally very flat, and are very ſubject to be damaged by Inundations of Waters, from the Fall of great Rains; which obliges their Farmers to lay up their Earth, in the higheſt Manner poſſible with the Foot-plough, even to near four Feet high, from the Ridge to the Water-thorough: And that they may lie thus high, and dry, they lay up their half Acre-lands, at the Sowing of Wheat, as ſharp as they can, by Ridging them up, contrary to what they practiſe about *Cheddington*, and many other Places, in the ſame Vale, where their Ground lies not quite ſo wet, and therefore caſt it down, when they ſow Wheat. About this Village of *Newton*, I think, ſome of their Farmers as bad Huſbandmen, as any I ever ſaw, for they neglect to ſow a Bean-crop, after a Wheat-crop. It is true, that moſt

most of the Vale Farmers sow only Wheat and Horse-beans, and make a Fallow every third Year: But these set on only a Wheat-crop, and let the Ground lie fallow two Years together. I cannot indeed say, they have nothing growing on their Land the second Year after Wheat; because, instead of a Bean-crop, which should have succeeded the Wheat-crop, they only mow a Crop of Thistles, and other Weeds, that they carefully make into Hay, for their Horses and Cows Winter Subsistence, in wet, frosty, and snowy Seasons, as may appear by what I am going to relate.

How they mow Thistles, and other Weeds, near Newton, *for making them into Hay.*— A Neighbour of mine, about the latter End of this Month, was travelling from the Town of *Buckingham* Home, who, in his Way through *Wadden Chace*, mistook his Road, which obliged him to arrive late at a single Public-house, near this Village of *Newton*, where he put up his Horse; and when the Landlord came to rack up the Horse for all Night, he brought a a Parcel of Hay, to my Neighbour's Surprize, made of Thistles, and other Weeds. On asking the Reason of this, the Landlord said, that several of his Neighbours were such indolent People, that they would not sow their Land with Beans, because the Thistle, wild Oat, wild Parsnip, yellow Curlock, Hale-weed, *May*-weed, and other Sorts of Weeds would choak and ruin the Crop; and therefore they let these Weeds grow, in order to mow them for Hay, and, when it was well made, they esteemed it good Hay; for that they took Care to mow the Thistles and Weeds, before they grew too old, rank, and hard; and then they made such good Hay, that they sell it by Weight. To this, the Landlord added, they were sensible, that a Flock of Sheep, timely turned in among Beans, would feed on the Weeds in their Infancy, and cripple their Growth, to the

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Nourishment of the Bean-crop: But some of their petty, or poor Farmers, were so obstinate, that they would not buy in Sheep for this Purpose, for fear, I suppose, of losing them by the Rot, to which they are the most subject, of any other Country I ever was in. He also said, that their Farmers were very well apprized of the beneficial Way that generally accrued to them, by setting Horse-beans cross their Ridge-lands in Rows, at about twelve or fifteen Inches asunder, and that this Method would not only save Seed, but give them an Opportunity afterwards of houghing between the Rows, to keep down Weeds; but they thought even this Way too troublesome and chargeable; and therefore, rather than do it, they would sow no Beans: However, as they had heard of drilling Horse-beans out of a Hopper, fixed in a particular Instrument, they should be mighty glad to enjoy such a beneficial Conveniency; and the more, if a Horse-break could be drawn between the Rows of Beans to kill the Weeds, and nourish the Corn at a cheap Rate. Here the Landlords deserve Reflexion; but of this in next Month.

How such Vale-Farmers may be encouraged to sow their wet Ridge-lands two Years together.— By this Time, I suppose, my Reader will think it highly necessary, I should inform these People, how to improve the Land better, than what they have done by the Account I have given, or else my exposing their bad Husbandry will be to little Purpose. To this End, therefore, I have this to offer, that, as these Ridge half-acre Vale-lands oblige the Farmer to plow them always one Way, either by ridging them up, or casting them down: It is certain, that they have not that Opportunity of shortening and sweetening their Ground so expeditiously and safely, as a *Chilturn* Farmer has, who can plow and harrow his cross-ways at Pleasure. No, and therefore Weeds have a very great Advantage of increasing their Growth

Growth among their Corn-crops. Now as ſeveral of theſe little, or poor, Vale-Farmers cannot, or will not venture to buy and keep Sheep enough, ſufficient to eat and keep down the Growth of Weeds, nor be at the Charge of Houghing between their ſet Beans, ſome Invention that would ſupply ſuch Charge and Trouble, and would keep down the Growth of Weeds that ſour and impoveriſh their Land, and even diſcourage their Farmers from ſowing Horſe-beans, muſt certainly be of great Value to theſe People, and to their Landlords. I therefore intend, in the next Month, or in *February*, to inform them, and many others, of two very cheap Inſtruments, that will effectually anſwer theſe great Ends, and which I never yet deſcribed in any of my former Works.

CHAP. V.

Of Sowing forward Peaſe in Middleſex.

THIS Country chiefly conſiſts of three different Sorts of Soils. In, and near *London*, they abound with the gravelly Sort, which is of ſo lean and hungry a Nature, that they would have but very poor Crops of Graſs and Garden Ware, were it not for their vaſt Quantities of Dungs and Manures, that they are continually making and applying. About *Chelſea*, *Hammerſmith*, *Fulham*, and their contiguous Parts, they enjoy a much better Soil, than any where elſe in this County; a Soil that I call a very good one, that is, a ſandy Loam; and where it is ſuch, there is hardly any exceeds it, for the Growth of any Sort of Grain, or Culinary Vegetables; becauſe this Soil is ſeldom or never overflowed by Waters, by reaſon its hollow Particles ſerve

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as a Drain or Strainer to let them deſcend in ſuch an expeditious a Manner, as to deliver the Surface from the Stagnation and Chill of Waters; and yet not ſo quick, but that the Roots of ſuch Vegetables may receive their due Nouriſhment from them. It is this charming Soil alſo, that, by its hollow and ſhort Nature, gives the Plough and Spade an eaſy Opportunity of bringing it under a fine, ſweet Tilth, in a little Time. One Plowing or Digging here will go as far as two or three about *Acton* and *Hendon*, where their Earth conſiſts of yellow or red clayey Loams; and therefore they are here enabled to get three or four Crops of Grain, or Culinary Vegetable, off of an Acre of their ſandy, loamy Ground, in one Year; becauſe they can lodge greater Quantities of Dung in this Soil, than they can in clayey wet Bottoms; for here they can plow and dig it in deeper, and rot it ſooner, than in ſuch ſtiff Earths; inſomuch, that ſome of their Ground is almoſt in a continual Ferment and *Chaleur*, as their Pea and Bean-gatherers often painfully experience, by the burning Heat their Feet ſuffer, in long and dry hot Seaſons of the Year. This dry Soil, though it lies in a low, flat Situation, gives the Farmer and Gardener the great Conveniency, better than any other, of ſowing his Peaſe in the Broad-land, or Round-work Way, either by the Drill-plough, or by ſtraining or ſpraining them out of a Man's Hand, in a Furrow, or Thorough, after the Swing-plough, which are covered by the Fall of the next Thorough of Earth, and ſo on, till all is ſown and harrowed afterwards. And here they may ſow the early *Barns's*, or ſhort Hot-Spur, or long Hot-ſpur Pea for the firſt Crop, in *October*, *November*, or in this Month, in a mild Time, or the *Eſſex-Roading* ſmall Pea will do for the ſame Purpoſe; and this, in a ſafer Manner, than in any other Part of *England*, as this Ground lies near the hot Air of *London*, and the Soil is naturally dry

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and warm of itſelf, that defends the Pea-crops very much from the Spoil of Froſts, Wets, and North-eaſt Winds; which the clayey, ſtiff, loamy Soils of *Middleſex*, that lie about *Acton*, *Edgware*, and *Hendon*, very much expoſe them to; and therefore, here they are forced to ſow or ſet their Peaſe in three, four, or ſix or more Bout-lands, according as they lie more or leſs dry. If they ſow them, they may do it here either by the Drill-plough, or by ſowing them in a Thorough that their Swing-plough makes, or in the Broad-caſt Faſhion, or harrow them in on the rough Ground, as the Plough leaves it. In the *Chriſtmas* Holidays, they were plowing and ſowing a Sort of Grey-pea about *Acton*; and here it is, that they ſow moſt of their Peaſe in Drills, becauſe they can have them ſooner ripe, and turn and gather them much better, than if they were ſown in Broad-lands after a promiſcuous Manner, as the ancient Way was. In *Middleſex*, as they ſow their Peaſe for gathering them in the green Pod, they ſow them at ſeveral Times in the Year, that one Crop may ſucceed another; and thereby they are enabled to furniſh the great City with their delicious green Food, from *May* or *June*, at a cheap Rate, till *Michaelmas*. And when a Crop of early Peaſe is got off, they ſow Peaſe again for a latter Crop, or Turneps, or Wheat, *&c.* Thus, theſe *Middleſex* Farmers get a Crop or two more in a Year, than we can do, who live at thirty Miles Diſtance from the Metropolis. But this one Article ſtands againſt them: That neither their Pea, Bean, Carrot, Turnep, Cabbage, nor *Savoy* Crops, can be ſo delicately ſweet and wholeſome as ours are, for the moſt Part, in *Hertfordſhire*, becauſe the Dreſſing of our Land, by the Fold, by Lime, by Chalk, by Malt-duſt, by Oil-cake Powder, by Horn-ſhavings, Trotters, Hooves and Hair of Beaſts, cauſes all Vegetables, that grow by their fertile Aſſiſtance in Gravels, Chalks, Sands,

and dry Loams, to eat moſt pleaſantly ſweet, and be very healthful to the human Body, in Compariſon of thoſe that grow by the Nouriſhment of the filthy rank Dungs of *London*. But of this, and the ſeveral Sorts of Peaſe, they uſually ſow in *Middleſex*, I intend to write more particularly of in next Month.

Of Sowing Hog-peaſe in this Month, in chalky Soils. — At *Wards-comb*, in the Pariſh of *Ivingboe*, in *Buckinghamſhire*, a great Deal of their Land conſiſts of a ſtiffiſh Chalk, of a Nature between a dry Hurlucky, or what we call a ſhort *Sugar-plum* Chalk, and a white Clay. In this Soil, a Quaker Farmer was plowing and ſowing the Horn-grey Hog-pea, in *Chriſtmas* Holidays, for the ſeveral Reaſons hereafter mentioned, *viz.*

The Reaſons why a Quaker Farmer ſowed his chalky Ground with Peaſe, ſo early as in Chriſtmas *Holidays.*— This Horn-grey Pea is of a pretty large Size, but not ſo large as to deſerve the Name of a Rouncival-Pea, and is, paſt Contradiction, the hardieſt Pea of all others whatſoever; for this Pea will withſtand the Severity of froſty Weather, when all others are deſtroyed by its Violence, having this particular beneficial Quality belonging to it: That though, through the Vehemency of the cold, chilly Air, the Infant Heads and Stalks of this Pea are ſo pinched by it, as to turn even almoſt as red as a Fox's Tail, yet, on a Succeſſion of mild Weather, they will recover their priſtine Verdure, and flouriſh again; and this they will do ſeveral Times, as Froſts and mild Weather alternately happen; a Character I can give no other Pea, with ſuch a Certainty, as I can of this. Yet as hardy as this Pea is, when it is ſown in Clays, or ſtiff loamy Ground, it has ſuffered by long Froſts, and chilly Wets, which have overpowered its hardy Quality: However, there is no Pea, known in our Parts of *Hertfordſhire*,

Yorkſhire, that ſuits either a Chalk, a Clay, or a ſtiff Loam, ſo well as this Horn-grey Pea, provided, in Caſe they are to be ſown in a chalky Soil, that the following Directions are ſtrictly obſerved: Firſt, that, in this Soil, the Foot-plough be made Uſe of before the Wheel-plough; becauſe the Foot-plough will turn a Thorough, or Furrow, much thinner than the Wheel-plough, by which Means, the Pea-head will the better make its Way through this Cover of Earth, for there have many Times fatal Conſequences followed the Miſtake of uſing the Wheel-plough, where the Foot-plough ought to have gone. I ſhall remark but one Inſtance here of this, and that is: One of my Neighbours, who had a Ten-acre incloſed Field adjoining to one of mine, was ſo perverſely obſtinate, as to make Choice of a Pecked-ſhare Two-wheel Pea-ſtitch Plough, to plow in his Peaſe, that were ſtrained or ſprained out of a Man's Hand, in a loamy, gravelly Soil, which turned up ſo deep a Thorough, as to bury moſt of his Peaſe, whoſe tender Heads could not make their Way through the hard Cruſt of ſuch a binding Earth; and ſo loſt great Part of his Pea-crop: When his next Neighbour ſucceeded as well as he did ill, by making Uſe of, and ſowing his Peaſe in a Thorough, made by the Foot-plough, that turned ſo thin an Earth, as, with the Help of Harrows employed afterwards, gave the Pea-heads an eaſy, free Paſſage into the Air. Secondly, that this Horn-grey Pea be ſown in this, or next Month, at furtheſt, in ſuch a chalky Soil; and why this Quaker Farmer did begin Sowing them ſo early, as in the *Chriſtmas* Holidays, was, becauſe he formerly loſt great Part of his Pea-crops by ſowing them late; for then, ſuch dry Weather happening afterwards to follow ſuch Sowing, in the firſt Place, it let in the Froſts, to their Roots, and did them ſome Harm. But the next

Damage proved worſe than this, for, a long dry Seaſon ſucceeding the froſty ones, the Sun had Room to enter this looſe Earth, and dry up their Roots to their great Spoil; which Suffering taught this Quaker Farmer to begin early enough to prevent theſe Diſaſters: Accordingly, he began in *Chriſtmas* Holidays, that the Pea-crops might enjoy the Benefits of the *January* and *February* Rains; for this dry Soil will ſometimes bear a Shower of Rain every other Day very well, and then theſe nouriſhing Showers will cauſe the Peaſe to flouriſh and *rally* (as the Country Term is) to ſuch a Degree, in a little Time, as to get a Head capable of ſhading and defending their Roots againſt any Extremity of cold, or dry and hot Weather, all the Summer long afterwards. And as a further Incitation to my Reader (who may be concerned in ſuch a Soil) to ſow the Horn-grey Pea early, let him remember the old Maxim — Sow early, and have Corn; Sow late, and have Straw.— A Truth that Thouſands of good and bad Husbandmen have yearly experienced.-- In the laſt Place, there is this particular Obſervation to be regarded in the ſowing of ſuch an early Crop of the Horn-grey Pea in a chalky Soil: There muſt be four, or, better, five Buſhels of this Seed ſown out of a Man's Hand in all the Thoroughs that a Plough makes in one Acre; for here he is obliged to ſow the Peaſe ſo thick, that they may come up thick and cloſe: This prevents both Froſts and Droughts entering the Ground to hurt their Roots; and, the older they grow, their Stalks will the better anſwer this beneficial Purpoſe, and ſecure them betimes againſt the ſharp Winds of *March*, which are very apt to dry and blow away this looſe Earth from the Roots of all Corn that grows therein, and leave many of them ſo bare, as to kill them. This leads me to take Notice of that general Misfortune, which has very much contributed to the Breaking of ſome Farmers,

mers, who occupied much Land that was of the chalky Sort, the Reaſon of which is as follows:

How the Sowing of Hog-peaſe, in a wrong Manner, has contributed to the Breaking of ſome Farmers.— For a Proof of this, I need not go many Miles from my own Home, where are great Quantities of chalky and gravelly Soils, and where ſome Farmers have broke and others very much ſuffered, I believe, I may venture to affirm it, partly from the Sowing of Hog-peaſe in a wrong Manner; for, where they grudge Seed enough, the Heat will certainly enter, and dry up the Roots, in very hot and long dry Summer-weather; and then they complain of their great Loſſes by the going away and drying up of the Pea-bloſſom, to the Ruin of the Crop. Now, it is obvious, that this Misfortune is owing, in a great Degree, to the Sowing of their Pea-ſeed too thin, for then the Interſpaces, in ſuch looſe Earth, give the Sun Room to enter, and ſoon dry up that Moiſture, which ſhould remain longer to nouriſh the Pea-roots; and which is very much prevented, when the Stalks and Leaves grow together in a very cloſe Poſture; for then they, like a great Company of Men, can eaſily hinder an Enemy breaking in upon them, when a few, that ſtand at a wider Diſtance, will be eaſily overcome. It is this Sort of Loſs, occaſioned by ſowing Peaſe too thin, that has of late obliged ſeveral of theſe chalky Farmers to leave off ſowing any Peaſe at all in this Soil, and take to the ſowing of Oats in their Room, every *Lent* Seaſon, to their great Prejudice, on Account of wanting Pea-ſtraw to feed their Horſes, Cows, and Sheep with in Winter; for that this Straw, when got in dry and ſweet, will ſupply the Want of Hay, as I yearly, and moſt other *Chilturn* Farmers experience: And, of all Pea-ſtraw, there is none ſo good for this Purpoſe, as that made for the Hog-pea; and,

and, of all Hog-Peaſe, there is none that produces a better Haulm or Straw, than the Horn-grey Pea. But this great Evil in next Month, or in *February*, I intend to ſhew how it may be effectually remedied, not only by ſowing Pea-ſeed thick enough, but alſo in another much better Manner, by more than one Means; but, before I quit the Pea-Subject here, I ſhall further enlarge by ſhewing the great Uſefulneſs of employing the Foot-Plough in the Sowing of Peaſe.

How profitable the Foot-Plough is to a Farmer, in the Sowing of Hog-Peaſe in Broad-lands. — As moſt chalky Soils are infeſted with ſeveral particular Sorts of Weeds, that will certainly damage, if not ſpoil a Pea-Crop, if not eradicated by the Mattock, or cut by the Plough or Weed-Hook, it therefore concerns the Farmer to uſe his beſt Endeavours to prevent their Miſchief in Time. Now, where Weeds are many and large, the Farmer is diſcouraged from attempting their Deſtruction by the Mattock, as being too chargeable and tedious an Undertaking. And, as to the Weed-Hook, it will do ſome Good, but not without Charge, and damaging the Crop otherways. It is on this Account, that I recommend the Foot-Plough with an Iron Fin, or Wing, fixed on its Broad-ſhare, near the Point of it, for cutting all Roots that it meets with in its Way, and this without any Charge to the Farmer; for the Fin is not only neceſſary for the Purpoſe of cutting in two and hindering or cripling the Growth of Weeds, but alſo for plowing the Ground thinner than any other Plough whatſoever can, even to the Thickneſs of little more than an Inch, if Occaſion was; and which is very neceſſary to be done at the Sowing of Peaſe, becauſe, by ſuch thin Plowing, the Pea-ſeed will not be in Danger of being buried. Thus, this

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Foot-Plough, with its broad Point and Fin, will cut the Cats-tail, or great blue Weed, the Poppy, the Curlock, the *May*-weed, and others ſo, as to check the Luxuriancy of their Growth all the Summer after; and, if they are not checked, they will greatly damage Pea, Thetch, and Oat-Crops, eſpecially the Cats-tail-weed, which always comes up once in three Years, and no oftener, becauſe the Tilth for Wheat prevents them. But, when it does, an old Cats-tail will ſpread almoſt two or three Feet about, and increaſe, if let alone, very much, to the Spoiling of any Corn that grows in the Compaſs of it; for it roots ſomewhat forked at the Bottom, and in its upper Part like a Carrot. Thus I have given an Account of managing a Pea-Crop, when ſown early in this Month, in a chalky Soil in the Broad-land Way of Plowing, which was abſolutely neceſſary to be done; becauſe Hundreds have loſt their Pea-Crops, for Want of knowing how to manage them at firſt, and are altogether ignorant of ſowing Peaſe by the three-wheel Drill-Plough, *&c.* But, before I conclude this Pea Article, I muſt obſerve, that it is the ill Huſbandry of ſome Farmers, to let ſuch Weeds as the Cats-tail and Poppy alone till Weeding Time; and then, if they will check their further Growth, they muſt in wet Weather pull them up by the Hand, like a Dock; but, by ſuch Pulling, they muſt ſpoil a conſiderable Quantity of Corn, where they are thick, by trampling and treading it down; and, even then ſuch Pulling will not deſtroy them quite, becauſe they leave ſome remaining Strings in the Ground: However, if they leave theſe Weeds undiſturbed in their Growth till *May*, they then muſt pull them up, by reaſon their Stalks are too many and too large for the Weed-hook. But, in the next Month, I ſhall give an Account of two or three other new Ways of ſowing Peaſe.

How

How Honey-Suckle, as a Weed, deſtroys a Pea-Crop, and the Way to prevent it.— In laſt Month, I gave the Honey-Suckle a double Character. One was on its being an excellent profitable Graſs, and the other as it is a moſt deſtructive Weed. The firſt for its killing Couch-graſs and other Weeds, and for feeding and very expeditiouſly fattening Cattle, free of that hoving Quality that attends Clover. And, ſecondly, for its damaging Crops of Corn where it grows thick amongſt them: It is on this laſt Account that I here reſume the Subject, on Purpoſe to further expoſe the worſt Part of it, and prevent its pernicious Effects among Grain. Now this Honey-Suckle grows both in gravelly and ſtiff Loams, but moſt of all in the latter, and has at this Time got ſuch a Poſſeſſion of moſt of our plowed Fields about *Gaddeſden*, and the Weſtern Parts of *Hertfordſhire*, that few are without its Growth, more or leſs; and where it is thick, in the fallow Year, many mow it for making Hay, others for Seed, and others feed it green, inſtead of Clover. Hence it is that we in theſe Parts furniſh great Quantities of its Seed to *London*, where they ſell it under the Name of *Cow-graſs*; and though I write on it as a natural Graſs, yet it may be ſown and made to become an annual one to great Profit, as Clover, Treyfoil, or other artificial Graſſes are. And accordingly I undertake to furniſh any Gentleman, or Farmer, with any Quantity of its Seed, ſaved the ſame Year in the greateſt Perfection, clear of the Danger of buying too old or Mow-burn Seed, which ſeldom or never grows to Profit. Some are of Opinion, that the Honey-Suckle breeds naturally in ſome Sort of Ground, and the more where the Earth is in a fine Tilth; for this Reaſon the Honey-Suckle is obſerved to come up moſt in a Wheat Year, and not in *Lent* Crops, for which Reaſon they ſay, the

the finer the Tilth, the ſooner and more the Honey-Suckle appears. Others think four Tilths breed it moſt, but, whether the Cauſe be this or that, it is certainly a moſt pernicious Weed among Corn-Crops: And therefore in this Month plow up that Stubble you deſign to ſow with Peaſe, that the ſame Ground may have two Plowings, otherwiſe, where it has taken with the Honey-Suckle in any great Degree, you muſt not expect a good Crop of Peaſe, that is to be ſown in the promiſcuous, or the Stitch Way; for this Weed kills many of the Pea Roots, if the Land has only one Plowing beſtowed upon it. Others think Soot or Aſhes breeds the Honey-Suckle, when it is ſown among Corn in Plowed-grounds; but it has been obſerved, that, where no Soot has been made Uſe of, this Weed grows. As I ſaid in laſt Month, ſo I ſay in this, that, when its Seed is ſown for producing only one Year's Crop of Graſs, and then to be plowed up, if the Ground is in good Heart, it will grow in a wet Summer, to two or three Feet in Length to great Profit, and conſequently muſt do conſiderable Service in the *Middleſex* ſtiff clayey Loams, where the Twitch or Couch-graſs grows ſo rampant, that they are every Year forced to plow and harrow much to kill it, by raking it off the Land and burning it; but the Honey-Suckle will ſave them much, or all of that Labour, becauſe here it will grow ſo rank in their rich dunged Grounds, as to deſtroy the Growth of the Twitch-graſs by its greater and high ſpreading Cover, and yet will not hover Cows or Sheep, as Clover will.

CHAP. VI.

Of Plowing for Oats.

HOW to prepare Ground, for Sowing it with Oats in February. — The latter End of this Month will be a good Time, if the Weather permits to plow up four Lays into Broad-lands; and alſo all ſuch Wood-grounds that have been lately ſtocked, and dug clean ready for the Plough's Going; and this in order to get it ready for ſowing Oats in them in *February* or *March* next, in the Broad-land, or Drill Way. Now, why ſuch previous early Plowings are requiſite for ſowing the ſame Land with Oats in *February*, is, becauſe it thus lies expoſed to the Froſts, which ſo ſhatter the Surface, and ſo ſweeten the Earth, as makes it more readily receive and invelope the Seed, and carry on its Growth with the greater Fertility. Such early Plowing alſo prepares the Earth for ſowing it with Oats in the Drill-Way, by ſweetening and looſening its Parts, and makes it the better fit for the Drill-Plough, to ſow the Oats in Drills. I know a Gentleman, who, laſt Year, got a prodigious Crop of Oats this Way from Seed ſown out of the Pulley-Plough in a ſtiff Soil; which is a Piece of Huſbandry that all ought to make Uſe of, that have ſuch Land and can afford to buy ſuch a Plough.

CHAP.

CHAP. VII.

Of Sheep *and* Turneps.

Of Turnep-crops, and how Sheep dreſs and improve Land by their feeding on them.— By this, Plowed-Ground may be vaſtly enriched and improved, eſpecially where the Turneps are large, and ſtand thick, ſo that Ground is not loſt by Vacancies; ſuch large Turneps will be fed and ſcooped hollow, and, when they are ſo, they will receive and hold Dews and Rain-water, which corrupt the remaining Part of them, and cauſe them to imbibe the Nitre of the Air; and, when the Shell breaks, it ſpreads and fertiliſes more Ground than the Turneps ſtood on. By feeding Sheep on Turneps, the Land is dunged, as if it had been folded; inſomuch that it is allowed by the Generality of Farmers, if one Acre of Turneps is ſold for forty Shillings to feed Sheep on them, they will leave twenty Shillings Worth of Dreſſing behind them; and ſo in Proportion to the Goodneſs of the Crop, and the Number of Sheep fed thereon.

How to prevent fatting Sheep ſuffering by froſty Weather.— This is an Article of Importance to write on, becauſe I ſhall here give an Account of the good and bad Succeſs of Turnep-crops in particular, as they relate to the Feeding and Fattening of Sheep deſigned for the Market. A Gentleman's Bayliff ſowed ſome of the round, red Turnep-ſeed, and the round green Turnep-ſeed, in the ſame Field, that was extraordinary well dunged, though the Ground was in very good Heart before: The Effect of this was, that, in this Month, 1742, the red proved to be a very large Sort of Turnep, and was

thought to be the biggeſt ever ſeen in our Parts; but the green Turnep proved the beſt of the two; for, the red at this Time being in their greateſt Magnitude, and old, by being ſown early in the Summer, they were got ſo ſpungy, ſtringy, tough, and dryiſh, that they were good for little elſe but to be beat in Pieces, and plowed in to dreſs the Ground, inſtead of Dung, yet they were kept to feed Sheep with, but to little Purpoſe; for now they ſtood ſo much above Ground, and had ſuch ſhallow Rooting in it, by the few Roots that this Turnep naturally always had; that the Sheep, by only treading about on them, turned ſeveral out of their Places; and others, that did not ſuffer this Way, when they came to ſtrain their Jaws in ſcooping them, were likewiſe diſplaced; and then, being rolled about in the Dirt, were refuſed, and left to rot; while the round green Turnep took deeper Root in the Ground, ſtood firmer, and, having its Head leſs expoſed to the Air, than the red round Turnep, the Froſts had not that Power, nor the Sheep by their Tread and Bite, to hurt them, as both did the red, to their Owner's Detriment. This Caſe was alſo verified by the Growth of Turneps, in *Dagnal* Fields, near me, where, in ſeveral of them, their large Sort, having moſt, or all, their Heads above Ground, were ſo expoſed to ſome ſharp Froſts that happened in this Month, 1742, that they loſt a great Deal of that Goodneſs which a more couchant Turnep, of a leſſer Size, enjoyed; for no Turnep is near ſo valuable after the Froſt has thoroughly penetrated it, as before; this made a Man, who bought two Acres of Turneps that grew in a *Dagnal* Field, ſell them about the Country, the latter End of this Month, for ſound ſweet Turneps; which being of a middling Bigneſs, and of the round green Sort, the Froſts had not that Power to hurt them, as the lar-

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ger Turnep, whoſe Head grew almoſt out of the Ground. Hence I would obſerve, that there was a great Fault in the Conduct of their Owner, by letting his red great Turneps remain ſo long uneaten, as to get ſtringy, huſky, dryiſh, and weak-rooted, by which they did but half Service, or leſs, towards fatting his Sheep, and dreſſing his Ground, as otherwiſe they would have done, if he had eaten them with Sheep before they had got old and rank, and damaged by the Froſts; and yet this Perſon did not ſuffer ſo great a Loſs by his Turnep-crop, as a Butcher did, who bought a large one for fatting his Sheep, in the hard Winter, of 1739, for *Smithfield* Market, as I am going to relate by what follows:

How a Turnep-crop may be eaten off in a ſafe and profitable Manner.— In this Month, moſt Turnep-crops are in their greateſt Perfection for feeding and fattening of Sheep, provided deep Snows keep off; then, if rightly managed, they will fat them apace; and the more, if a Rack of Hay is ſet in the ſame Field for feeding Sheep at Pleaſure, in order to prevent theſe fatal Diſeaſes of the red and white Water, which is a Sort of Dropſy, very incident to theſe Creatures, while they are feeding on the watery Turnep; and therefore, ſuch dry Food is more than neceſſary at this Time, to faſten and bind this looſe Meat, and cauſe the Beaſt to thrive the faſter. But, if deep Snow fall ſo that fatting Sheep cannot come at them, enough to fill their Bellies, then Peaſe in a Trough ſhould be given them, or, better, Peaſe and Bran mixed together; or Horſe-beans alone, or Oats. Thoſe, or any of theſe, the Sheep will eat, and they will improve and fat them with great Expedition, and thus they will loſe no Time; but this Sort of dry Food is moſt of all neceſſary to be given Sheep, when Turneps begin to rot by Froſts, Rains, and Thaws; for then ſuch Turneps are very apt to ſtink, putrefy, and cauſe a Sickneſs in Sheep, ſo as

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to make them fall away, inſtead of thriving; and ſome to die by it, unleſs they have the Aſſiſtance of ſuch Trough-meat. In the great Froſt of 1739, a Butcher (as I have formerly mentioned) who lives near me, bought ſome Fields of Turneps to fat his Sheep for a *London* Market, and at firſt they went on very well, till the great Froſt broke and rotted the Turneps, ſo that they ſtunk like Carrion; however, the Butcher did not take that Care of them, as was neceſſary, to preſerve and further their Fattening, by enough of dry, hearty Trough and Rack-meat in Time; and therefore he loſt a pretty many of them by the Red-water and Sickneſs, while others grew lean, inſtead of fattening, to his very great Loſs: For, having only Hay in the ſame Field with the ſtinking Turneps, the Sheep endeavoured to fill their Bellies with both; but, the Turneps being rotten, they took off their Appetites from both Hay and Turneps, and thus they were brought into a pining, lingering Condition, till many of them died: However, if theſe Diſaſters do not happen, and the Weather proves propitious for feeding and fattening of Sheep on Turneps, then take Care and watch them early and late, leſt two other Misfortunes befal them, as they have happened to many others, who have been killed by them. One is, that when Turneps are in their priſtine full Growth, their Leaves are endued with a windy ſtrong Quality, which is very perilous to this Creature, as well as to larger Beaſts, the Cow and Ox, many of which have been hoved and killed by the Feed of theſe Leaves, before Aſſiſtance could come to their Relief; for, in this Caſe, many have been ſaved by Remedies given them at the Mouth, or by ſtabbing them, to let the Wind out, as the moſt deſperate and laſt Shift. The other Misfortune, that I would precaution againſt, is, Sheep, Cows, or Oxen, being choaked by a Piece of Turnep from a large one,

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or by a ſmall one ſticking in their Throats, to which theſe Creatures are very liable, that feed on Turneps in a Field; and therefore they ſhould be either conſtantly watched, or frequently viſited, that a Remedy may be made Uſe of in Time, as I am in the next Paragraph to make known.

How to ſave Sheep, Cows, or Oxen, that are either hoved by feeding on the Leaves of Turneps, or choaked by their Roots.— But of this in *February*, for Want of Room here, and becauſe then there is the greateſt Danger of Cattle's Hoving, by Reaſon the Leaves or Sprouts are firmeſt, and ſubject to be the more dangerous, on Account of the Rains that uſually fall in that Month.

A new Contrivance for ſaving Sheep from being hurt or killed by open Hurdles, while they are feeding on Turneps for Fatting.—— Before Sheep are brought into a Field of Turneps, we always provide before-hand a Row of Hurdles, for the Conveniency of giving them ſuch a Quantity of Turneps as the Farmer thinks fit at a Time. Now there are two Sorts of Hurdles made Uſe of for Folding Sheep in, and confining them to ſuch a Parcel and no more. One Sort is the rodded, or cloſe made Hurdle, which are very much, I believe, I may ſay, altogether made Uſe of in the Weſt Country, for this Purpoſe. I think it was between *Enford*, and *Warminſter* in *Wiltſhire*, I ſaw one Fold of this Sort, that encompaſſed a whole Acre of Land at a Time; for here they keep the greateſt Flocks of all others, that live in remoter Parts of this Kingdom; and it is here that their Farmers are more in the Right than we are in *Hertfordſhire*, becauſe theſe rodded Hurdles are ſo cloſely worked, that they will keep out a Hare, and break off all Winds from the Sheep, to a great Degree; which likewiſe prevents the ſeveral Misfortunes that ſometimes happen to us by

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the worſe open Hurdle, which, I call *open*, becauſe it is made of only five Sloats of Sollar, Aſh, or Haſle, *&c.* and fixed in two Side-heads, being two Inches broad, as much thick, nine Feet long, and about one Foot Diſtance from each other; ſo that a Sheep, by being folded in ſuch open Hurdles, has put his Head between the Sloats of one of them, and, by ſtruggling to get out, has been found dead, when the Owner has come in a Morning. It is, on this Account, I am going to give the Farmer a Caution, that never was yet wrote by any Author whatſoever; and that is, in Caſe he feeds his Sheep by theſe wide Hurdles, as we do almoſt all over *Hertfordſhire*, in the Vale of *Aylesbury*, and moſt other Places in the North, that, as ſoon as he has removed his Hurdles, to give the Sheep a freſh Parcel of Turneps, he pull up all thoſe Turneps that grow in the Breadth of two Feet on the Outſide of them, and give them to the Sheep to eat amongſt thoſe ſtanding ones within Side; likewiſe, that he draw and pull up all thoſe Turneps, that grow within two Feet of the Inſide the Hurdles, which he is alſo to lay among the ſtanding or unpulled ones within-ſide, in order for the Sheep to eat them all. Now, the Reaſon for all this is, that, by pulling up thoſe Turneps that grew within two Feet of the Outſide of theſe Hurdles, the Sheep are in a great Meaſure prevented from ſtriving to put their Heads between the Sloats to come at them, which they are very prone to endeavour for getting a freſh Bite; and this the more, when they have almoſt eaten up thoſe within-ſide. Alſo, by pulling up thoſe Turneps that grew within two Feet of the Inſide of the Hurdles, the Sheep are prevented walking, trampling, and ſpoiling them, which they would have done, by going to and fro, in Search of a Place in the Hurdles to get through, after a freſh Bite of Turneps; and, at the ſame Time as they

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thus put their Heads between the Sloats, they rake and tear off their Wool from about their Heads and Breasts, besides hazarding their Lives; for, if any of them should be catched, and fastened in by their Horns between the Sloats in the Night-time, it is a Chance but they die by Morning. It is therefore that a Farmer will act the good Husbandman if, as soon as he has set his Row of Hurdles, he pulls up all those Turneps that grow within two Feet of the Inside and Outside of them, and then he need not be apprehensive of those fatal Accidents that have happened by the Neglect of such Management.

The great Benefit of stored, or hoarded Turneps.—In this Month, it sometimes happens, that great Frosts, or deep Snows, deprive Sheep and Bullocks from coming at the Feed of Turneps in the Field; and which likewise prevents their being drawn, or pulled up, for Hoarding, or for a Sale at Market. Now, therefore, the Farmer's bad, or good Husbandry, is brought to the Test; if he has made a Turnep-hoard in Time, by placing considerable Number of them in a Barn, or other sheltered Place, close enough to keep out Frosts, and other Weather, from damaging them, then it is in his Power to bring such hoarded Turneps out, or Carrots, or Parsnips, for feeding his Sheep, Cows, Bullocks, or Swine, Rabbits, Bustards, Turkies, Pheasants, or Peacocks, Geese, or Ducks, with them under Cover, or in an open Place, so that these can have full Room and Power to eat them raw, or prepared; or, if he has been so frugal, to hoard any or all these Roots, in Pits in the Field, he may now make a great Advantage of them, by feeding Sheep, Cows, Bullocks, Swine, Rabbits, Bustards, Turkies, Pheasants, Peacocks, Geese, Ducks, *Guinea* Hens, *Guinea* Pigs, and other Creatures, who delight in such delicious Food, which, in such cold Weather, will very expeditiously fatten them; because, as these Roots are

not frozen, and as Cattle in ſuch froſty Seaſons have the greateſt Appetite, they will eat much, and thrive apace. Accordingly, this good Husbandry of hoarding Turneps, Carrots, Parſnips, and Potatoes is more duly obſerved in *Suffolk*, *Norfolk*, and other ſandy Parts of the Eaſt, than any where elſe in *Great-Britain*; particularly in Relation to the yellow Turnep, which is the ſweeteſt of all others, as being of the carroty Kind, and therefore more profitable, not only for their Sheep and Bullocks, *&c.* but alſo for their Horſes, elſe theſe Eaſtern Farmers would ſtand a poor Chance of making their Rents; for, if it was not for theſe Turneps, they muſt make Uſe of Rye, Barley, or Oats, and then it would not anſwer, by Reaſon it is theſe Grains, and their fatted Cattle, that pay their Rent, as not being able, in a thouſand Parts of theſe ſandy Countries, to get any Wheat, or Peaſe, or Beans: But, with this yellow carroty Turnep, they feed their Plough and Cart-Horſes in great Perfection, for ſome of them will feed and fat on them as they eat them in the Manger. It is alſo by ſuch Hoarding of Turneps, that the *Leighton*, *Brickhill*, *Wooburn*, and *Ampthill* Gardeners bring them out of their Sand-pits at this Time of Year, and ſo in many other Places, for ſupplying our Markets, when none of the Field-Turneps, can be come at, for Froſts and Snows. It is alſo by the Help of Turneps, that many Farmers, and poor People, who live in Vales, where they dare not ſow any Turneps, for Fear of their making ſuch Holes in their ſtiff Soils, as will hold Water, ſour the Ground, and cauſe them the Loſs of great Crops of Corn; for, where a large Turnep has grown, there will remain a hollow Place behind it, and prove a Receptacle for the Rain, and hinder the ſame Earth from being got into a true, fine, ſweet Tilth, for Years after, unleſs an extraordinary long dry Seaſon happens, in the next or ſucceeding Years: I ſay, theſe Vale People, who

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can have no Turneps growing in their wet Ridge-lands, buy theſe that are brought them, out of ſandy, gravelly, and chalky Countries, to boil, not only with their Meat, but alſo with Bran for Swine; which ſuch a Mixture will wonderfully do, and ſave the Charge of more coſtly Food, till the Hog is half, or more fat, and then Peaſe, or Beans, will be neceſſary to carry on his Fatting, and harden his Fleſh.

CHAP. VIII.

Of Cleaning Corn *for Market.*

OF *Cleaning Corn for Market.*— Now Wheat, Barley, Oats, Beans, Peaſe, and other Grain, are near got as dry, as they will be, in the Mow, in the Cock, and in the Barn; and, as the Field-work is by the Beginning of this Month for the moſt Part over, and the Weather commonly froſty and ſnowy, the Farmer in Courſe, for theſe, and other Reaſons, is obliged to employ his Hands in traſhing out and cleaning Corn for Market; a Work that requires a good Workman: For, though Corn is got in dry, yet, if the Taſker cannot clean and free it of the Seeds of Weeds, and other Trumpery, the Maſter muſt conſequently be a Loſer. On this Account, I believe, I may affirm it for a Truth, that there have been two or three Shillings loſt in five Buſhels of Wheat, for Want of a ſkilful diligent Workman's cleaning it thoroughly well: And therefore it is, that many of our *Hertfordſhire* Farmers will give a good Taſker ſeven Pounds a Year, before they will a bad one five; becauſe the Want of the Corn's being duly cleaned may thus amount to a great Sum in one Year's Time; for when a Crop of Corn

has the Seeds of Weeds mixed among it, or, if it is ſmutty, or abounds with Pepper-Wheat (which is often unavoidable in ſome Soils) then the Art of the Tarker is to get out all, or moſt, of ſuch Seeds of Weeds, and clean it from many of its Smutty or Pepper-Wheat Kernels. To do which, there are ſeveral Ways practiſed in different Countries, as I ſhall by and by give an Account of; and the rather, becauſe no Author whatſoever has hitherto done it, although it is a moſt material Article in the Art of good Husbandry, and ſo neceſſary, that our fineſt Bread cannot be made in the pureſt Condition, unleſs Corn is truly freed from the Mixture of the many pernicious Weeds that often grow among it; ſome of which, as the Crow-garlic, or Wild-onion, the Melilet, and ſome others give the Wheat ſuch a nauſeous Tang, and unwholſome Quality, that the Bread, made from it, is very much damaged; and ſo are Gruels, Puddings, and other Things made from thoſe Oats, where ſuch filthy Seeds of Weeds have grown amongſt it; and yet the Darnel, the Burr, the Crow-needle, and others are often ſeen among Grain, as it ſtands to be ſold in our Markets, which are chiefly propagated by the old *Virgilian* promiſcuous Way of ſowing the Seeds of Corn, that admits not of getting the Weed all clean out of Crops of Grain, as they grow in the Field. Hence it was, that there was a Neceſſity for the Invention of the Drilling-huſbandry, becauſe it gives the Farmer an Opportunity to extirpate and deſtroy the Growth of the Seeds of Weeds amongſt Corn, by houghing the Interſpaces and Vacancies between its Rows or Drills, the greateſt Part of the Summer, when the Sap, in ſuch Weeds, is in its ſtrongeſt Motion, or Circulation, and thereby the more eaſily killed. On this Account it was, that the excellent Pay-rent Three-wheel Drill-plough and Horſe-break were

contrived, and get more and more into Uſe, for preventing the vaſt Charge of weeding Corn by the Weed-Hook, treading it down to perform the ſame, and then leaving the Weeds to make a ſecond Growth the ſame Summer, and doing their Miſchief when Corn is at that Heighth, that they cannot be come at; ſo that Corn, thus ſown in the random Faſhion, is inevitably liable to have the Seeds of Weeds grow among it, to the Farmer's great Prejudice; and the more, if his Workman-Taſker do not get them from out of the Corn he is to make ready for a Market-Sale; and, that he may be the better capacitated for doing it in the greateſt Perfection, I ſhall proceed to give an Account of the firſt Stage of it, and that is:

Of Thraſhing Wheat in Middleſex.— There are Differences in Thraſhing of Corn. In *Middleſex*, they differ in this Work from *Hertfordſhire*, becauſe, as their Country is ſituated near *London*, and they make good Part of their Rent by the Sale of their Wheat-ſtraw, they are very careful to preſerve it as reedy or long as they can, in order to keep the Straw in its original Body, as it came out of the Field; ſo that the Length of their ſtraight Straws, when bundled up in a Truſs, will be about five Feet, or more: For this Purpoſe, they ſpread their unbound Wheat-Sheaves, and lay them flat on the Barn-Floor, with one Row of Ears oppoſite to the other: When this is done, the Taſker is ready to make Uſe of his Flail, of which there are three Sorts; one that is capped with Iron at the End of the Hand-ſtaff, and turns a Swingel by an iron Swivel, that makes it a very durable one; but the Iron and the Wood do not rightly agree together, for the Iron is apt to cut and wear away the Wood too ſoon; the ſecond Flail is made with a Capping of Horn, that is generally allowed to be the beſt of all others, becauſe this is neither too hard, nor too ſoft, and laſts a great

a great while; the third Flail is made with a Piece of bent Aſh, and is the commoneſt Sort of Capping that is made, as being the cheapeſt of all others. The Flail being ready, the Taſker, as I ſaid, throws his Wheat-Sheaves from off the Mow, and lays them flat on the Barn-Flour, with their Heads and Ears againſt one another, ſo that, when two Rows are thus compleated, he falls to Work; and, if he is acute at his Buſineſs, he will bring up the Swingel as cloſe to his Head as he can, by which, with the more Facility, he is enabled to ſtrike downright ſharp Strokes, with great Quickneſs, for beating out the Wheat-Kernels, in the moſt compleat Manner; while a bad Workman, who, through Ignorance, may bring up his Swingel in a half-roundiſh Swing, will be a conſiderable Time longer about his Work, and not ſo well able to get out all the Wheat. Now the *Middleſex* Farmer, beyond all others in *England*, ſtands moſt in need of an honeſt, diligent, ſkilful Workman, for thraſhing out his Wheat, becauſe here he is obliged to preſerve his Straw in its longeſt and ſtiffeſt Condition for a *London* Market, inſomuch that it muſt appear in a hard, ſtraight, reedy Poſture, or elſe he may carry it home again; but this they are not wanting in, eſpecially when a Truſs of Wheat-ſtraw, weighing thirty-ſix Pounds, fetches eight or ten Pence, as ſometimes it does, at the higheſt Price, and at the loweſt, a Groat a Truſs: And, that their Wheat-ſtraw may anſwer theſe Purpoſes, the Taſker dares not make Uſe of thoſe ſweeping horizontal Strokes, in the Time of his Thraſhing, as is commonly done by the *Hertfordſhire*, *Buckinghamſhire*, and many other Thraſhers; if he does, he will beat up the Straw in Puckers, break it, and render it ſo ſoft and weak, as to be refuſed at Market: To prevent this, he makes Uſe of only his two Hands to ſhake the looſe Kernels out of the Ears and Straw, and thraſhes on, till he thinks all

all wants Turning: Then with the Help of the Hand-ſtaff, and one Hand, he turns the Flooring, leaving that Straw with its Ears uppermoſt, that before lay undermoſt, but ſtill preſerves all in the Poſture it firſt was put in. Next he thraſhes away again, till he thinks it is enough done, and then, with a Fork, he ſtirs and ſhakes all the Straw, to let the remaining Wheat-Kernels fall out. When the Thraſhing is thus finiſhed, the next Thing is to bind the Straw up in Truſſes, which the Workman does directly from off the Barn-floor, as the Straw lies in Length, and, with Bands made of the ſame, tucks all up in a very tight Manner, ready for loading, and carrying it to *London*; which theſe *Middleſex* Men do in a more compleat Way, than all others that I ever ſaw, for theſe bind ſometimes a Load and a Half, or more, on one of their large Carts, which is fifty-four Truſſes; a Number they could not carry, were it not that the Roads are mended by Turnpikes, and made, for about ten Miles round *London*, ſome of the beſt in *England*. Now here I have to remark, that Wheat, thus thraſhed in *Middleſex*, is the fouleſt thraſhed of any in *England*, becauſe, as I ſaid, they are obliged to thraſh it as it lies always one Way, as not daring to break the Straw more than needs muſt, by any croſs Strokes of the Flail, according to the Practice, I believe I may ſay, of all other Counties in this Nation, as the beſt Way of all others to clean the Ears of their Kernels; for by firſt throwing downright Strokes, and then ſweeping or croſs ones, the Flail ſtrikes thoſe Ears that were covered and defended againſt only downright Strokes, as I ſhall more particularly obſerve by and by: However, though the *Middleſex* Farmers loſe a good Deal of Wheat this Way in a Year, for Want of clean Thraſhing it out, the Poultry, kept in the Inn-Yards of *London*, find ſometimes a pretty Deal among the Stable-Litters; and

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the more, when they take ſome of the ſhort Straws, with their Ears, from off the Heap of thraſhed Corn, and tuck into the Body of the Truſs, when they find it a little too light. But, before I quit this Paragraph, I ſhall touch on a Matter, as it happened to one of our *Hertfordſhire* Thraſhers, as he was working in a Barn in *Middleſex*. This Man, among others, went up out of our Parts into this, at Mowing-Seaſon, as is the conſtant yearly Cuſtom of great Numbers of Men, out of *Hertfordſhire* and *Buckinghamſhire*, where ſome of them ſtay a Month, or two together, for mowing Graſs, and making Hay; but it ſometimes happens, that great Rains fall frequently in the Time, which obliges the Farmer to find out Work for ſome, to keep them employed, leſt they leave him, and he want them afterwards: For this Purpoſe, one of theſe Meadow Farmers, who plowed ſome Grounds every Year, ſet the Man at Work to thraſh Wheat, and accordingly he began, and proceeded as he did in *Hertfordſhire*; but, as ſoon as the Maſter perceived it, he fell a railing at him, and telling him he had better give him ſome Shillings a Day to ſtand ſtill, rather than go on as he did; on this, the Thraſher aſking the Reaſon, the Maſter ſaid, becauſe he would ſpoil all his Straw, by the ſweeping croſs Strokes that he made. Then the Man followed his Directions, and thraſhed out the Wheat, by only downright Strokes of the Flail, as the *Middleſex* Way is; in ſhort, the *Middleſex* Farmer does not regret the Taſker's leaving a pretty many Kernels among his Wheat-ſtraw, becauſe, he cannot well do otherwiſe, in this Way of thraſhing; for, if they thraſh all the Wheat clean out, they muſt break the Straw, and ſpoil its Sale.

The Cleaning of Wheat in Middleſex.— As to the Cleaning of Wheat in *Middleſex*, they follow the ſame Method of doing it, as we do in *Hertfordſhire*, which I ſhall, by and by, give an Account of.

CHAP.

CHAP. VIII.

The Hertfordſhire *Way of thraſhing* Wheat, *and cleaning it.*

THE Hertfordſhire *Way of thraſhing Wheat*. The *Hertfordſhire Chilturn* Country, and the *Buckinghamſhire* Vale-country Way of thraſhing Wheat, is one and the ſame; they only differ in the cleaning of it. In both, it is of high Importance to the Farmer, to have a long and broad Thraſhing-floor; becauſe, in the firſt Place, his Taſker can lay a greater Number of Wheat-ſheaves on it at a Time, than he can on a leſſer Floor; which will ſave him a conſiderable Time, in preventing him going twice on the Wheat-Mow, for the ſame Quantity of Sheaves. Secondly, by a large Floor, he has Liberty to move on backwards and forwards with ſtriking the largeſt Strokes, when and where he thinks fit, and it is by ſuch downright and ſweeping Blows with the Swingel, that the Thraſher ſtrikes out ſome of the Corns, almoſt as high as the Rafters of the Barn; ſo that by the Force of his downright, and his ſweeping croſs Strokes, he has here the greateſt Opportunity of thraſhing out a great Deal of Wheat in one Day, and this in the cleaneſt Manner. Thirdly, by the full Length and Breadth of a neceſſary Barn-floor, the Thraſher can clean his Wheat much better than in a ſhort Floor; and this, becauſe, by the long Throw of the Caſting-ſhovel, the Crow-needle, the ſticky Seeds of that ugly Weed the Bur, the light Corns of that worſt of Weeds the Darnel, and many other Seeds of Weeds drop ſhort in the long Space that is between the Thrower and the Barn-cloth. On this Account, it is, that I am ſanguine enough to aſſert, that one Throw of Wheat over a long Floor is better than two over a ſhort Floor, as is well known to almoſt all Thraſhers; becauſe, by a ſhort Throw

with the Caſting-Shovel, the Seeds of Weeds will be carried in great Numbers with the Wheat, and but few fall ſhort, in Compariſon of a long Throw; ſo that, in a ſhort Throw, there is hardly half that Advantage in the cleaning of Wheat, as in a long Throw. Fourthly, in a long Floor, there is Room for two Men to thraſh, to the Farmer's greater Advantage; becauſe two Men can thraſh out the Kernels cleaner than one Man, by their Blows coming quicker and cloſer on the Wheat-Ears, which beat out the Corns with the greater Force, confine them more to the Spot of Ground, and get out that Chaff which a ſingle Flail cannot ſo well do. Two Flails, working at a Time, break the Wheat more at once going over it the firſt Time, than a ſingle Flail can do; which is very material in thraſhing this Grain; becauſe, if it can be thoroughly beaten, the firſt Time going over it, it requires the leſs Trouble afterwards; but, if the firſt Thraſhing is a ſlender one, it requires the more Trouble afterwards; and this is often the Caſe of a ſingle Flail in a large Floor. However, where a Floor is of a leſſer Size, and admits of only one Man's Thraſhing, I ſay, in ſuch a ſhort Floor, one Man may do as much, or more, in Proportion, than two; becauſe here there is not Room for two Men to thraſh at a Time, and therefore one will be apt to hinder the other's Working. When one Man thraſhes Wheat, he at laſt draws off only a ſingle Row at a Time, which is tedious; but, when two thraſh together, they draw off a double, or the whole Flooring of Straw at once, and thus do a great Deal in a little Time. In the County of *Middleſex*, they generally have extraordinary Barn-floors; in *Hertfordſhire*, there are ſome very good ones, and ſo in *Buckinghamſhire*. But I am of Opinion, that, for the moſt Part, thoſe in *Kent* excel. And here I ſhould go on in deſcribing the Manner of laying Barn-floors for their longer Duration, and greater

greater Conveniency of thraſhing out Corn; but that is rather too long a Subject for this Month's Treatiſe, and, therefore, I ſhall defer it to a more convenient Opportunity.

The Hertfordſhire *Way of cleaning Wheat.*— In this Work, as I ſaid before, we do not differ from the *Middleſex* Farmers, but proceed in all Reſpects as they do in the following Manner, *viz.* After we have thraſhed out our Wheat, we, with a Caving-Rake, of five, or ſix wooden Teeth, rake off the offal ſhort Straws, and other Trumpery, and put it into a Caving-Sieve, through which we paſs all the Kernels that may be among it, and we can get out; and then throw the remaining groſs Stuff to one Place, in order to get a Heap of it, and thraſh it out at a more leiſure Opportunity. When the Wheat is thus cleared of its Offal or Caving, the Taſker ſtands at one End of a Barn-floor, and with the broad, light, Caſting-ſhovel he throws it to the other End; when all is done, he ſweeps off what we call the *Corals*, or thoſe Wheat-Kernels that would not part with their Chaff in thraſhing: And then, in Caſe the Wheat is not thrown clear enough of the Seeds of Weeds and Chaff, ſome will throw it a ſecond Time, to get them all, or near all out; in order to which, the Taſker is to obſerve as at firſt, whether the Wind blows againſt his Throw, or with it. If it blows with it, it is wrong for his Purpoſe; becauſe it will blow and force the Chaff, and Seeds of Weeds, to keep Company in ſome Degree with the Wheat-Kernels. In this Caſe, therefore, he muſt carry the Wheat in a Buſhel, or throw it back, with the Caſting-Shovel, to the former Place, to enjoy the ſecond cleaning Throw, in the beſt Manner; which is a Matter of ſuch Importance, that, though the Barn-Doors, or Gates, are ſhut, and the Wind blows into the Barn, yet the Taſker ought to throw his Wheat againſt the

Wind. Indeed, where a Barn is made ſo very cloſe, that the Wind can have no Power, then they do not ſtand much upon this Point; but, if they have a Mind to throw it a ſecond Time, they throw it to the contrary End of the Floor, without regarding which Way the Wind is. After every four or five Buſhels are thrown, and the Corals are ſwept off, and the throwing Part is finiſhed: The next Thing to be done, is to further clean the Wheat, by the Wheat-ridder, which is a round, ſplintered Sieve, worked in a round Manner, by the Taſker's two Hands, and who, by the Art of working this Sieve, will cauſe thoſe Corals, Seeds of Weeds, and other Trumpery, that eſcaped the throwing Labour, to gather on the Top of the Wheat in the Sieve for his throwing them out, to be kept in a particular Parcel by themſelves, to be thraſhed hereafter; and this we call *Peggings*, being compoſed of thoſe Corals that were ſwept off the Heap of Wheat, after Throwing; and thoſe Corals, Seeds of Weeds, and other Trumpery the Ridder-Sieve thus diſcharges. Then the Farmer, when he has got a ſufficient Quantity of them, thraſhes them clean, and grinds them for his Family Uſe, or mixes ſome of theſe Peggings with ſome better Wheat, for his home Conſumption. And thus he does by his Cavings; for as all Wheat that ariſes from the Thraſhing of his Cavings, or Peggings, has a Mixture of the Seeds of Weeds, or Pepper or Smutty-Wheat, it is not fit to be carried to Market, with the better Sort; no, not a little of it, leſt ſuch a little ſpoil the Sale of a great Quantity of good Wheat. But to return to my Subject in Hand. After the Wheat has been cleaned, by throwing and riddering, the next, third, and laſt Stage of cleaning is done by ſcreening it; for this Purpoſe, the *Hertfordſhire*, *Middleſex*, and moſt other Farmers make Uſe of the tall Wire-ſcreen that ſtands in a leaning Poſture

of

of itſelf; and here the Taſker does all his Work himſelf, as he did when he throwed the Wheat. (But, when he riddered it, I ſhould have told you, he made Uſe of a Boy to ſupply his Sieve, by putting more Wheat into it, with a Shovel, as the Sieve let it out.) Now, this Screen having an open wooden Receiver, or Hopper, on the top Part, the Thraſher, with his Caſting-Shovel, puts up more Wheat from Time to Time, as the former paſſes through it; and ſo on till all are ſcreened and cleaned. Then the next and laſt Thing he does to his Wheat is meaſuring it, and, at the ſame Time, putting it up by the Buſhel into five Buſhel Sacks, which we in *Hertfordſhire* call one Load, and is carried on a Man's Back into a Cart or Waggon ready to be drawn to Market. This puts me in Mind of what I ſaw in other Countries, where their Sacks held three Buſhels only, others four; but, in our Country, they carry it all in five Buſhel Sacks; and at Market, thoſe Men, called *Sack-carriers*, carry a a Sack of Wheat twenty Poles together before they mount a high Ladder with it, to ſhoot it into a Grainary; but, as this is very hard and dangerous Work, we always give them three Half-pence a Sack for their Pains.

How ſome Farmers clean and manage the top Buſhel of a Sack of Wheat, for the better Sale of the whole Quantity they bring to Market. — Our *Hertfordſhire* Way of ſelling Wheat at Market is as follows: We carry either a Waggon or Cart-Load of Wheat, and have all the Sacks of Grain pitch'd down on the Ground; then, when the Market-Bell rings at Twelve o'Clock, every Farmer opens only one of his Sacks of Wheat, which ſerves as a Sample for ſelling that, and all the reſt of the Sacks. Accordingly the Buyer never ſcruples his not ſeeing and examining all the other Sacks of Wheat, while they ſtand in the Market; becauſe when they are

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ſhot in the Grainary (which they always do in an Hour or two, or thereabouts, after Buying) he then can ſee whether the Wheat be all alike: If not, then conſequently enſues a Fraction and an Abatement of Price, proportionable to the Fraud. But, to come cloſer to my preſent Deſign, it is the Practice of many Farmers to make the top Buſhel of every Sack they ſell by, a little cleaner and better than ordinary; and this they do by the Help of a braſs or iron Wire round Hand-Sieve, which we call a *Rying-Sieve*, through which the lighteſt thin-bodied Wheat-corns paſs, and alſo moſt of thoſe Seeds of Weeds which eſcaped being left behind at the throwing, riddering, and ſcreening Times, as I have before wrote of: And this Practice of Rying, or cleaning better than ordinary, every top Buſhel of each Sack we think a juſt Action, by Reaſon the Corals and Seeds of Weeds, that remain in the whole Sack of Wheat, are not to riſe up towards the Top in the moving, carrying, and pitching down of ſuch Sacks; and accordingly the Wheat-buyer never diſputes this Matter, though he may be ſenſible of it. But when the two top Buſhels or half the Sack of Wheat are ſerved ſo, on Purpoſe to deceive the Wheat-Buyer, if it be found out, it then is deemed a Fraud, and a Recompence commonly demanded, or elſe they will know that Man another Time, and buy no more of him, unleſs Neceſſity force them, and then they will look ſharp both after his Corn and Meaſure. But this Sort of Impoſition does not often happen, becauſe the Wheat-Buyer is as ſly as any of the Farmers, and as knowing as the beſt of them; and this with good Reaſon; for theſe Men travel every Week to *London*, to viſit the Bakers, and others of their Cuſtomers, and are all of them to a Man Maſters of that Knowledge, requiſite for their being compleat Judges of this Golden Grain, Wheat, in all

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its dividual Stages; as in that of its Bran, its Pollard, its Ran-dan, or the coarſeſt Wheat Flour that is made; its Second, or Middling, or that Meal commonly made Uſe of by Farmers for ſpending it in their Families, and for Country Tradeſmen; and in that fineſt of all Flour or Meal, called *Houſhold*, which is ſent to *London*, for the Sake of a greater Price it fetches there, more than in the Country.

CHAP. IX.

The Vale Way of thraſhing and cleaning Wheat.

THE Vale Way of thraſhing Wheat. —— The richeſt Land this Nation affords is commonly found in Vales, that returns the biggeſt of Crops, with the leaſt Dreſſing; and that thus makes the Farmer Amends for a bad Road, and the Want of Plenty of Wood; both which are commonly enjoyed in their greateſt Latitude by moſt *Chilturn* Farmers. As then theſe Vale Farmers enjoy the biggeſt Crops of Wheat in the Kingdom, they ſtand in Need of the ſtrongeſt and artfulleſt Thraſhers: Firſt, to get the Corn clean out of their long *Lammas* Ears and Straw, and next to clean it in the beſt Manner poſſible; and this they had need do, and every Thing elſe they can, to reach the greateſt Price at Market; for ſome of theſe come out of *Leiceſterſhire* and *Northamptonſhire*, as well as out of *Buckinghamſhire*, and draw fifty or ſixty Buſhels at a Time to *Hempſtead* Market, which lies thirty or forty Miles Diſtance from ſome of their Homes. They therefore employ the ſtouteſt and ſkilfulleſt Taſkers they can get,

get, for thraſhing out their Pay-rent Corn, Wheat; and, as they for the moſt Part poſſeſs the beſt of Oaken planked Floors, they take Care to have their Straw thraſhed thoroughly clean out; for all, that may be left behind by a ſlovenly Thraſher, is loſt to the Farmer. On this Account, it has been known, that a lazy ignorant Taſker has left as much Wheat behind him after he had done thraſhing it, as his Wages come to, for Reaſons I am going to give:

The Damage that ſome Farmers have ſuſtained by knaviſh and idle Thraſhers of Corn. — The Sort of Damage, I am going to write of, accrues for the moſt Part to indolent Gentlemen, and thoſe Farmers who are negligent of inſpecting into their Domeſtic Affairs, or unſkilful in judging into Huſbandry Matters when they do. This Damage here is committed by two Sorts of Perſons, the menial Taſker Servant, and the Days-man Thraſher. If by the firſt, he does it chiefly for the Sake of making Haſte to thraſh out five Buſhels of Wheat in one Day, and leave it in its Chaff, in order to ſpend the Remainder of the ſame Day in the Enjoyment of his Pleaſure abroad; for, ſays he, if I can perform my Taſk in thraſhing out and cleaning five and twenty Buſhels of Wheat in one Week, what is it to my Maſter whether I work or play? But here too often happens a Damage to the Maſter; for the Thraſher, to diſpatch his Taſk, and have the more Time to himſelf, I ſay, too often thraſhes out the Head of the Wheat, and leaves that which ſticks cloſeſt and faſteſt in the Chaff and Ear behind, becauſe this Sort requires the more Labour and longeſt Beating to get it out; and thus, as I ſaid before, all ſuch Wheat, ſo left unthraſhed, becomes loſt to the Maſter. If the Damage is done by the Second, it is often done altogether out of Lazineſs, becauſe the Days-man

Thraſher

Thraſher has his Wages paid him commonly for his Work, be it for any thing he is ſet about, and accordingly muſt remain in the Barn from ſix o'Clock in the Morning, to ſix o'Clock in the Evening in Summer Time: Therefore, in Courſe, he will make his Work as eaſy as he can, and that is to be done in Thraſhing, by beating out only the biggeſt Corns, that always came out firſt, and thus leave many of the ſmall Corns behind in the Ear, becauſe they require more than ordinary Labour to get out. This puts me in Mind how a raſcally Fellow ſerved a Gentleman Farmer, or *Yeoman*, as the Country Term is. The Gentleman, to prevent (as he thought) a Day's-man Thraſher's impoſing on him, bargained with him to thraſh and clean his Wheat for three Pence a Buſhel fit for Market, the Bargain being made during the Gentleman's Pleaſure: This Thraſher found out a Way to be too cunning for him, by taking this Advantage; he threw down a Flooring of Wheat-Sheaves off the Mow, as uſual, and ſeemingly before the Gentleman's Face thraſhed in a right Manner; but, in his Abſence, he took the Opportunity of beating ſo much Corn out of every Sheaf, as would come out very eaſily, and then bound up the ſame Sheaf, and laid it in a Part of the Mow, where it could appear as if it had never been meddled withal. And thus he proceeded till he got the Quantity that was to be ſent to Market, in Hopes that, when the next Thraſher was employed, they would lay this Fraud to his Charge, and forget the Veteran Rogue.

The Vale Way of cleaning Wheat. — In Vales, as in *Chilturn* Countries, their Way of thraſhing Wheat, as I have obſerved, is one and the ſame; but, in cleaning it for Market, they differ very much. In the Vale, they clean by the Wind-fan, as being the cleaneſt Way of all others; and although

our *Chilturn* Farmers refuſe to follow it, for Reaſons I ſhall by and by aſſign, yet our *Chilturn* Oat-meal-makers prefer it beyond all; becauſe it blows away their Hulls, and Offal-ſtuff, better than any Way they can invent; and, for a farther Proof of all this, I ſhall produce undeniable Reaſons before I quit this Chapter. After the Wheat is thraſhed and cavined, ſo that all the groſs ſhort Straws and other Trumpery are taken out of it, and the Wheat and Chaff only left, the Wind-fan is ſet near the Door of the Barn, and a Buſhel or Tub with its Bottom upwards placed by it, for a Man to ſtand on it, the better and more conveniently to ſieve out the Wheat before the Wind-fan, which is here placed and worked, to blow away all Chaff, Seeds of Weeds, and the lighteſt Kernels from among the capital big-bodied Kernels, in order for cauſing it to fetch the beſt Price at Market. Now they compleatly perform this Work, without the Help of two Men and a Boy. One Man ſieves out the Corn, and the Boy with a Shovel ſupplies the Sieve as quick as the Sifter can diſcharge it. The third turns the Wind-fan, and, by the quick Motion of its Sails, produces ſo ſtrong a Wind, as clears the Wheat in the greateſt Perfection; and the better, as the Fan is placed , for obtaining the greateſt Share of Wind to blow away the Chaff Weeds, and light Kernels of the Wheat. The Head-wheat is ſieved and fanned but once; but the leger Sort is ſieved and fanned twice, to get all in the beſt Order. Thus two Men and a Boy can clean ten Quarters of Wheat in one Day, with Eaſe, when one *Chilturn* Thraſher, with a Boy to fill the Ridder-Sieve, finds it tight Work to clean five and twenty Buſhels of Wheat in one Day, by throwing it out of its Chaff, riddering it, and ſcreening it. And now I come to prove that thoſe Farmers, who clean their Wheat by the Wind-fan,

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clean it much eaſier, cheaper, and better than the *Chilturn* Farmer: Eaſier, becauſe the Wind-fan ſaves a great deal of Labour, which the *Chilturn* Farmer employs in throwing and cleaning his Corn: Cheaper, becauſe two Men and a Boy will do a conſiderable deal more in a Day, than the *Chilturn* Men can with the ſame Number of Hands: Better, becauſe it is publickly known, at *Hempſtead*, and other great Markets in *Hertfordſhire*, that the Vale-wheat comes, for the moſt Part, much cleaner from Soil and Trumpery than our *Chilturn*-wheat generally does; and not only cleaner, but larger-bodied; becauſe, by the vehement Force of the Wind which the Fan raiſes, the moſt light Wheat-kernels are blown away from the main Heap; ſo that there remain none but theſe of a larger Size, which always meet with a Preference at Market: Wherefore it is plain, that it is not only their occupying better Land than our *Chilturn* or *Hill* Farmers do, that cauſes them to ſell the largeſt-bodied Corn for the greateſt Price; but their Way of cleaning it adds a prodigious Advantage to it, as I have here, I think, ſufficiently proved. And happy it is for them, that they do thus enjoy the beſt of Land, and make Uſe of the beſt of Art to clean their Grain; for, as many of them draw their Wheat twenty, thirty, or more Miles an End to our Markets, if they did not ſell it the ſame Day they brought it, it would be to their very great Damage, by reaſon it would oblige them to attend another Market for its Sale at a great Expence. In ſhort, the Vale-Farmer often does as much at once Sifting and Fanning, as the *Chilturn* Farmer does at twice Throwing and Ridering; for, when Wheat is in a foul Condition by the Seeds of Weeds and other Trumpery, the *Chilturn* Farmer is frequently obliged to throw it twice, and ridder it twice, before he can make it fit for

the Screen. Hence the uſual Saying took its Riſe, that once Throwing of ſome Wheat will do it as much Service, as two Throws will do a worſe Sort. That is, when Wheat is not very foul, once Throwing it will clean it, as much as twice Throwing will a fouler Sort. In a Word, the Vale-Farmer is thought to have the Advantage of the *Chilturn* Farmer in the Cleaning of his Wheat; but Cuſtom carries it ſo much in the Country, that there are frequently ſeen, even in one and the ſame Pariſh, two different Ways of plowing and ſowing the ſame Sort of Land, in the Management of their Cattle and many other Things in the Farming Way; inſomuch that one obſtinate Farmer, by his continuing his obſolete old and wrong Method of proceeding in Huſbandry Affairs, has broke, and his Succeſſor got Money, and went forward, as much as the other went backwards in the World; and this by his more rational and improved Way of going on as I have ſhewn in many Inſtances of my former Works, and intend in my future ones to farther make appear.

CHAP. X.

Of Thraſhing Barley *in* Middleſex, Hertfordſhire, *and in* Vales.

THE Way of Thraſhing Barley in Middleſex, Hertfordſhire, *and in* Vales.— This Work is done in one and the ſame Manner throughout all theſe Countries, for they vary in nothing but in the cleaning Part. There is, indeed, this Advantage in either of them: Where there is a ſound planked Oaken or Beachen Floor, of a neceſſary Breadth and Length, two Thraſhers are far better than one; and more particularly ſo, for thraſhing out Barley beyond

beyond all other large Grain, as I ſhall make appear by what follows, *viz.*

Why two Men are more neceſſary to thraſh out Barley than any other large Grain. — This I pretend to prove from the Nature of the Barley-Corn; for there is no Corn, that I know of, ſo liable to withſtand the Strokes of the Flail, as Barley, and this for the following Reaſons: Firſt, when Barley-ſeed is ſown late, which the Farmers in many Places are forced to do, becauſe of eating their Turneps or Cole off ſo late as *April*, it often happens, that dry Weather ſucceeds the Sowing of it, and ſometimes continues four, ſix, or eight Weeks together. In this Caſe, there generally enſue two or three Ripeneſſes in a Barley-Crop. That Seed, which lay deepeſt in the Earth, always comes up firſt; that, which lay next deepeſt, comes up next; and that, which lay uppermoſt, comes up laſt; ſo that, at Mowing-time, one Parcel is ripe, the other half ripe, and the other greeniſh. Now ſuch a Medley of ripe and unripe Barley gives the Thraſher Occaſion to exert his Strength, and try his Skill to the utmoſt; for, as there are not only many unripe Corns in the Ears, but alſo many ſmall dwindling half Kernels, that ſtick ſo faſt, as hardly can be got out with all the Labour that can be uſed by the Thraſher, there muſt be conſequently many left behind; but the more where only one Man is employed in thraſhing, as I ſhall by and by further obſerve. In the ſecond Place, when Ground is dreſſed or manured in ſuch a rich Manner, that, with the Help of ſuch a rainy warm Spring and Summer, the Barley runs into ſo great a Crop, as to be laid before Harveſt, it then commonly yields a lean thin Kernel, that will be difficult to get out. Thirdly, it always happens, that, when Barley is mowed before it is full ripe, it proves very hard to the Thraſher to force it out of its Ear. Fourthly

and

and laſtly, if Barley is thraſhed before it has done ſweating in the Mow, it adheres very cloſe to its Huſk, and muſt require hard Labour indeed to thraſh it clean out; becauſe it miſſes one Part of that Maturity or Cure, that is requiſite to make it part eaſily from its Huſk and Ear. As to the firſt, I have in my former Works printed the beſt Receipt for preventing any Damage happening to a Barley-Crop by Exceſs of dry Weather, that ever was publiſhed. As to the ſecond, there wants no Advice; and, for the third and fourth Caſes, he muſt be an ignorant, or a knaviſh Farmer, that ſuffers his Barley to come under theſe Misfortunes. Why I make Uſe of the Term *Knaviſh* is on Account of thoſe, who, to preſerve a fine pale Colour on the Barley-Corn, thraſh and ſell it preſently after it is out of the Field, without giving it Time in the Mow to ſweat, leſt the Weeds, that may be mowed and carried into the Barn with the Barley, cauſe it to ſweat ſo much, as to give it a higher Colour than the Farmer deſires. When it ſo happens, the Brewer commonly ſuffers, becauſe ſuch unſweated Barley-Corn ſeldom ſprouts and throws out its Spires in a right Manner for making true Malt: However, let Barley be got in ever ſo good Order, two Thraſhers at a Time, in one Barn, are far more preferable to the Owner than one; becauſe two Flails follow one another with ſo quick a Motion, that they keep it from jumping about, and confine the Ears in the Way of its Strokes much cloſer than a ſingle Flail can; but the main Reaſon why two Flails are better than one in this Work is, that they can beat and break the Ails or Beards of the Barley much more than a ſingle Flail can: A Thing ſo neceſſary to be done, that, if Barley is not delivered from theſe Exuberances, it will fetch the leſs Money at Market; for theſe Ails ſerve only to fill the Buſhel, and do no Service to the Buyer.

Buyer. After Barley is thraſhed out of the Straw, it is for the moſt Part thraſhed over again, in Order to tail it, or, as I ſaid, to get theſe Ails as clean off as they can; and, after all their Labour in thraſhing of the Ears and Straw with the Flail, there remains ſomething to be done beſides to clear the Barley of its Ails; and that is, as ſoon as the Straw and its Ears are well thraſhed, and carried off the Floor, then, if the Barley-Crop was inned in good Order, the two Thraſhers will work on with their Flails, and ſoundly beat the Barley again, while it lies in its Chaff, to break off theſe Tails or Ails that may remain on it; but, if the Barley-Crop was inned wettiſh, or otherwiſe ill, they commonly throw it firſt out of the Chaff, and then ſlack the the Heap of Corn not only once at it lies, but they turn it, and thraſh it again and again, and all for clearing the Barley of its pernicious Ails or Tails.

CHAP. XI.

Of Cleaning of Barley.

THE Middleſex *and* Hertfordſhire *Ways of cleaning* Barley. — In theſe two and in moſt other Countries of the *Chilturn*, they differ from the Vales, in the Manner of cleaning their Barley. When it is thraſhed out, and the Ails are beat and ſufficiently broke, they paſs the Corn through a large-holed Caving-Sieve, for taking away the ſhort Straws and offal Trumpery, in order to prepare it for cleaning, by throwing; and, where there is Room enough, two Men may throw it well to clear it of its Chaff, the Seeds of Weeds, and the lighteſt Corns. If the Barley was inned pretty clear of Weeds, was full ripe at Mowing, and had its due

due Cure, by ſweating in the Mow, then, perhaps, once Throwing will be enough to make it ready for a further Cleaning, by the great wooden and wired Screen; but, if it was ill inned, then it commonly requires a ſecond Throwing, to take out thoſe light and lean Kernels that would not drop ſhort in the Interſpace at the firſt Throwing. When the Barley is throwed enough, the next Thing to be done is, to ridder or riddle it; for which Purpoſe, a Boy attends the Man who ſieves it, by ſupplying him with more Barley, as faſt as it is diſcharged by the Sieve, and ſo on till all is done riddling, and made thus ready for the great Screen; I ſay, a wooden and wired flat Screen that ſtands a little ſloping, the better to let out the Duſt, Seeds of Weeds, and light Kernels, and to diſtinguiſh it from the long Worm-like wired Sieve; by which both Wheat, Barley, and Oats may be very expeditiouſly cleaned in great Perfection. When all the Barley is thus ſcreened, it is ready to put into Sacks for Market; but, in caſe ſome Seeds of Darnel ſhould be left among the Barley, as it often happens, becauſe theſe Seeds are ſo near the Bigneſs of a Barley-Corn, that they cannot be eaſily ſeparated, it is not of great Importance or Damage to the Barley; for that this Seed is of ſuch a Nature, as to add a Strength to the Liquor, and make the Beer or Ale, brewed from ſuch Malt, the more potent. But the main Matter is to free it off its Ails and Tails; for, if theſe are left, in any Quantity, among the Barley, there will a lower Price be bid for it, than others that are free from ſuch Trumpery. It is this that makes the Cleaners of Barley oftentimes walk on the thraſhed Barley, to tread on and break off theſe Ails; and ſometimes neither Thraſhing nor Treading will thoroughly break off theſe Ails enough to make the Parcel intirely clear of them. One Man will ſometimes thraſh and clean ſix or eight

eight Buſhels of Barley in one Day; and ſometimes it is Work enough for two. But when Barley has been inned well, and a plentiful Crop has happened, one Man has cleaned five Quarters of it in one Day, I may go farther and ſay ſix, but then it was all throwed out of its Chaff before he began cleaning.

CHAP. XII.

The Vale Way of cleaning Barley.

THE *Vale Way of cleaning* Barley. —— As to the Thraſhing Part of Barley in Vales, it is done the ſame as in *Middleſex* and *Hertfordſhire*, as I have before obſerved; they only vary in cleaning it, and that is thus: After they have thraſhed out the Barley clean from the Straw, they rake the coarſe offal ſhort Straws off, and then paſs Barley, Chaff, and all through a Sieve, to take out the next offal ſhort Straws and Ears that may remain among the Corn and Chaff: When this is done, they bring the Wind-fan near the Heap, and then with the Help of a Man to ſieve, and a Boy to ſupply it, they fan, as the Barley runs out of the Sive, and blow away the Chaff of ſome of the lighteſt Kernels into the Yard; and for this Purpoſe they lay the Heap of Barley, and place the Wind-fan ſo near the Barn-Door, that it may be blown into the Yard for fattening their Swine, and feeding their Poultry. This Method of Wind-fanning Corn is not only followed and practiſed in Vale Countries: It is alſo done much in the Weſt-Country among their dry Farms, and they take this Method to fatten their Swine in Part for Bacon; for a Porker will fat alone upon the light Kernels, and other Trumpery that is blown out of the Barn; for here they take all the Care poſſible to fatten a

great Number of Swine every Year; becauſe almoſt their whole Living depends upon this Sort of Fleſh, as is evident in ſome Meaſure by the common Anſwer a Traveller meets with at their Inns, when he aſks what is for Supper? Their Reply is, Pork and Cale, or Cole, or more properly Coleworts. Accordingly their Butchers make no Difficulty of killing Bacon-Hogs and Porkers throughout the whole Summer in many Places of the Weſt. At *Frome* I ſaw it done, I think, in *July*, without fearing any Damage accruing by the great Heat of the Weather, which in many other Places proves a ſufficient Reaſon to hinder the Slaughtering of Hogs, leſt they ſhould not make the Fleſh take Salt, and keep ſo ſafe and ſound as it will in cooler Weather; but here, I ſay, they are not apprehenſive of any ſuch Danger; becauſe, preſently after Killing, they throw the Fleſh into a Tub of Brine. But to return to my Subject. After the Heap of Barley is once cleaned by the Wind-fan, and they perceive it will be to their Advantage to fan over again the lighteſt Part of the Barley, they do it a ſecond Time; and then the Wind-fan leaves all the Corn in ſo compleat a Condition, as makes it fit to be put up in Sacks for a Market-Sale. And thus two Men and a Boy will clean more Quarters of Barley in a Day, than any two Men can by Throwing, Riddling, and Screening in our *Chilturn* Country; and, at the ſame Time, clear the Barley from Soil and Trumpery far better than ours can. But altho' I praiſe Vale-Farmers, and others, for their more expeditious and cleaner Way of preparing Wheat, Barley, and other Corn for Market, than what we do in the *Chilturn* Country of *Herifordſhire* and in *Middleſex*, yet I cannot well help diſpraiſing them in their extravagant Oeconomy of Fanning their light Corn and Chaff into the Farm-Yard, becauſe they muſt in Courſe waſte and loſe a great Part of their Chaff, and

and ſome of their Corn, by the Dirt and Tread of the Hogs Feet. If ſuch a Piece of Huſbandry was ſeen in our Parts, the very Boys would cry out Shame on ſuch a Farmer, for the great Waſte he would ſo make.

CHAP. XIII.

Of Thraſhing Oats, Peaſe, *and* Beans *in* Middleſex, Hertfordſhire, *and in* Vales.

THE Way of thraſhing and cleaning Oats, Peaſe, Beans, *and* Thetches, *in* Middleſex, Hertfordſhire, *and* Vales. —— The Thraſhing of Oats in *Middleſex*, *Hertfordſhire*, and in Vale Countries is performed all one Way, but their Cleaning is not; for, in the Vale, they differ from the two firſt Countries, by Wind-fanning their Oats after this Manner:

The Vale Way of cleaning Oats. — After they are thraſhed, they rake and cavin them, to get out the ſhort Straws, and other groſs Foulneſs; which when they have done, they are ready for the Wind-fan; and accordingly the Wind-fan is brought, and two Men and a Boy employed to clean them; ſome fan the Chaff, light Kernels, and Trumpery out of Doors into the Yard; others, that are better Huſbands, fan all their Oats ſo as to ſave their Chaff in the Barn with the lighteſt Kernels. The Tail, or light Part of their Oats, they ſometimes fan twice.

The Way of cleaning Oats *in* Middleſex *and* Hertfordſhire. — Their Way of cleaning Oats is much the ſame in one County as the other. They proceed thus: As ſoon as the Thraſhing Part is finiſhed, they rake off the ſhort Straws from the

Heap, and paſs the reſt through the Cavin large-holed Sieve; when this is done, they fan them with the Knee-fan; then paſs all through a Ridder-Sieve, which lets out the beſt Oats, and cauſes the Trumpery to riſe up to the Top, which is taken out by the Hand of the Sifter, and put into a Place by themſelves. Next, in caſe the Oats are thus almoſt cleaned, they only flack them with the Knee-fan again, to take out all the remaining Seeds of Weeds, very light Kernels, and other Trumpery, and ſo buſhel them up into a Sack; but, if they were not ſo clean as to do with what I have wrote, they paſs them a ſecond Time through the Ridder, or Riddle-Sieve, and then they are commonly done in Perfection.

The Vale Way of cleaning Beans, Peaſe, *and* Thetches.—— After theſe are thraſhed, the Heap is raked, and both Corn and Chaff paſſed through the Cavin-Sieve: When this is done, any of theſe Grains are ready to be cleaned by the Wind-fan, which will blow away the Chaff and Trumpery ſufficiently for ſacking them; for they ſeldom fan theſe twice.

The Middleſex *and* Hertfordſhire *Ways of cleaning* Beans, Peaſe, *and* Thetches. — Peaſe and Thetches are commonly cleaned thus: As ſoon as they are thraſhed out, the Straw and Trumpery are raked off the Heap; then they are throwed by the Caſting-Shovel, to take out and ſeparate the Chaff from the Peaſe and Thetches: Next, they are paſſed through the Wheat-ridder Sieve, for clearing them off Burs, ſmall Kids, and ſuch like Offal; which, by the Riddling, or round Sifting, cauſes them and the naughty Peaſe or Thetches to riſe on the Top, and ſo are taken out by the Sifter's Hand. They never throw theſe twice, becauſe they are of the heavieſt Sort of Corn, and therefore the eaſier ſeparated from their Chaff at once Throwing. Horſe-beans are cleaned in the ſame Manner as Peaſe and Thetches

Thetches in theſe two Counties, and ſeveral others. Two Men are ſeldom ſeen to clean Corn at one and the ſame Time in theſe Counties, unleſs the Floor is a very large one indeed. One Man can fan and clean five Quarters of Oats in a Day; for theſe are of too light a Body to clean by throwing. And one Man can clean fifty Buſhels of Peaſe in a Day, by once throwing and ſifting them. I ſhould have ſaid, that the Thraſhing of Beans, Peaſe, and Thetches is done all one Way in Vales, *Middleſex*, and *Hertfordſhire*; except that, in *Middleſex*, they for the moſt Part bind up the Horſe-beans in Sheaves, as ſoon as they are cut or reaped, and then they are lain on the Thraſhing-floor as we do Wheat-Sheaves ready for the Flail; and it is by this Means that ſuch Horſe-beans may be thraſhed eaſier, and much ſooner than in the Vale, or *Hertfordſhire* Way, which is to ſpread them on the Barn-floor promiſcuouſly as they are mown and brought out of the Field.

How ſome clean their Corn *in* Oxfordſhire. —— Their general Way of cleaning Corn, here, is by the Wind-fan; but when there is an urgent Neceſſity for cleaning a Griſs of Wheat to be ſent to the Mill, a Couple of Women will ſometimes take a Sheet in their Hands, which, by flacking to and fro, will clear the Chaff from the Corn; but this is a Make-ſhift; for this Sort of cleaning will not do for Market. About twenty or thirty Years ago, Women in ſome Parts of this Country, as well as in many more, would exert their Strength and Skill in Huſbandry Affairs, more than they do now; for then they would reap Corn, fill Dung-Carts, drive a Team, and now and then, for making Haſte, would mount a Horſe and ride away with the ſame to the Mill or otherwiſe.

The Kentiſh *Way of thraſhing* Corn. — Here they are ſo ſagacious, as to bind up not only their Wheat in Sheaves, but alſo bundle up all other Corn; by which Means the Ears are lain in two Rows, one againſt the other, and thus give the Thraſher an Opportunity of beating out more Corn in one Day, than when it lies promiſcuouſly, or in a confuſed Manner on the Floor. I ſhould enlarge here on their wiſe Method of firſt tying up their Corn in Bundles in the Field before they houſe it; but, as I have been pretty copious on this Matter before, I ſhall write no more here of it.

CHAP. XIV.

Of the ill Effects cauſed by different Meaſures of Corn.

HOW *Gentlemen and Farmers ſuffer conſiderable Loſſes by the different Meaſures of Buſhels.*-This Article I ſhould have aſſumed before this, to ſhew and expoſe the great Loſſes attending the Gentlemen and Farmers in the Sale of their Corn, by Means of the various Sorts of Buſhels now made Uſe of in many Parts of this Kingdom; I ſay, I ſhould have done this before now, in Hopes that what I have here to advance, on this Head, may be inſtrumental towards obtaining a Law to remedy this great Evil. Firſt, then, I ſhall obſerve, that there are ſeveral ill diſpoſed Perſons, as Corn-Buyers, Maltſters, and others, who keep two Sorts of Buſhels by them, one to buy by, and the other to ſell by; and this in ſome Places, even where the Braſs Standard *Winchester* Buſhel is kept in a Market, for deciding any Differences that may ariſe on the Account of Meaſure. But the Perſons, I am here expoſing, are not thoſe who care

care to viſit this Arbitrator, unleſs it be for an uncommon neceſſitous Reaſon, becauſe their chief End herein is to another Purpoſe: And that is, when they meet with a Noveliſt, or an unſkilful, or a modeſt Perſon that has been but once, or a few Times, at Market to ſell Corn, they then inſiſt on it, that he has not ſold ſufficient Meaſure, becauſe his Buſhel does not fill theirs. Now you muſt know, that ſuch Sale-Corn is very rarely ſold in the Market, without meaſuring one Buſhel out of every Sack; and if this one Buſhel does not hold out with their *Tub-Buſhel* (as ſome rightly name them) then a Demand enſues for a Recompence to be made by the Seller, according to the Proportion of what is wanted to fill the Buyer's Buſhel; and, if he is a *Junior*, full of Modeſty, and wants Courage to ſtand the Teſt of a Standard Deciſion, he ſubmits to what our Judge and Party Buyer thinks fit to mulct him. Oh! the Villany of ſuch Men, who well know at the ſame Time, they are thus biting and impoſing on an innocent Perſon, that they themſelves perhaps would be the moſt noiſy and clamorous of all others, were they to be uſed in the ſame Manner.

Do not with Ignorance unjuſtly deal,
All ſecret Wrongs to Heaven have Appeal.

For, as a Divine writes, they, who get and retain the Goods of others unjuſtly, are altogether as guilty of Robbery, as thoſe who take them by Force. Secondly, at *Cheſham* Corn-market, in *Buckinghamſhire*, that lies five and twenty Miles Diſtance from *London*, and about five Miles from *Hempſtead*, in *Hertfordſhire*, their cuſtomary Market-Buſhel is bigger than *Hempſtead* and *St. Alban's Wincheſter* Market-buſhel, by half a Peck in eight Buſhels, which is half a Buſhel and half a Peck in every five Quarters

of

of Barley or other Corn more than *Hempſtead* and *St. Alban's* Meaſure. At *Uxbridge* and *Ayleſbury* Markets, that lie about twenty Miles aſunder in *Buckinghamſhire*, their cuſtomary Market Corn-Buſhel holds nine Gallons; and ſo does the *Chelſea*, *Hammerſmith*, and *Fulham*, in *Middleſex*, Corn-buſhel hold the ſame nine Gallons, which is half a Peck in each Buſhel above the Standard *Wincheſter* Buſhel; and I am told, that, farther to the North-weſt, ſome Market-Buſhels are ſomething more than even nine Gallons. Here, I think, I have gone far enough to give a ſufficient Item of the Inequality of Buſhels, for my Reader's forming an Idea of the reſt. Hence then I would obſerve, how detrimental ſuch unequal and overplus Meaſure is to Gentlemen and Farmers in the Sale of their Corn. It is true, indeed, that, if a Perſon will inſiſt on Meaſuring his Grain that he ſells at any of theſe Markets by the *Wincheſter* Buſhel, he may ſafely do it; but then a Faſhion muſt be broke through, and ſuch a Seller afterwards looked on as a Crow is, among a Flock of Pigeons, hated by all the common Market-buyers; and, in ſhort, muſt be forced to ſell for a very underline Price, or be obliged to ſet up his Corn at a chargeable Rate in the Town-Loft from Time to Time, or carry it Home again. Laſtly, this Inequality of Meaſure ſeems to lie hard upon the Farmer, and eaſy upon the Wheat-buyer, Maltſter, and others, becauſe theſe buy large Meaſure, and ſell by ſmaller. That is, at ſome of theſe Markets afore-mentioned, they buy ſixty or more Pounds Weight for one Buſhel, and ſell again only the *Wincheſter* Standard of fifty-ſix Pound Weight to the Buſhel. Now, if ſuch unequal-meaſured Buſhels were to be adjuſted to the common Statute Meaſure of *Wincheſter* all over *England*, I do not doubt, but the Farmer would enjoy the ſame full Price of his Corn, as he did when he was forced, for Cuſtom-ſake, to bring the

the Over-plus Meaſure I have before obſerved: So that an Act of Parliament for reducing all the Market-buſhels of this Kingdom into one and the ſame Statute *Wincheſter* Meaſure, under a ſevere Penalty, would, in my humble Opinion, be of vaſt Service to thoſe Gentlemen and Farmers who occupy conſiderable Quantities of Arable Land, and are now forced to ſell their Corn at thoſe Markets where the private Tub unſizeable Buſhel is now and then in Uſe, or where the cuſtomary Market-buſhel is more than the Standard *Wincheſter* Buſhel.

A Copy of a Letter to a Member of Parliament.

SIR,

'AS it has been my Cuſtom for many Years to 'take all Advantages in my Power of ſerving 'my Country; I have made Uſe of the preſent Sub-'ject, with an Intention to do the ſame now. For 'which Purpoſe I humbly take the Liberty to ſend 'the incloſed Petition to your Worſhip, preſuming 'you will ſee Cauſe enough for Farmers to pray for 'a ſpeedy Relief; and as it affects Landlords, Te-'nants, and Tradeſmen, in general, it is hoped you 'will employ your ſtrenuous Endeavours to pro-'mote ſo glorious a Work, in delivering the *Britiſh* 'Farmers from the infinite Damage they muſt ne-'ceſſarily ſuſtain, if a Stop is not put to the Impor-'tation of Wheat, *&c.* from *America* into *Europe*.'

I am, honoured Sir, your moſt Obedient Servant,

WILLIAM ELLIS,

One of your Electors. To Charles Gore, *Eſq*; and William Houblon, *Eſq*; *Members of Parliament for* Hertfordſhire, *March* 20. 1742-3.

By this Date it may appear ſomewhat too late to hope for Relief this preſent Seſſion of Parliament, becauſe it ended on the But, as I thought I could not too ſoon endeavour the obtaining it, my Duty obliged me to preſent the Petition, and now lay the Caſe before the Public, for the informing them of theſe growing Evils, for ſo they are in a moſt potent Manner; inſomuch that it is of the higheſt Concern to *Great-Britain* to employ her beſt Endeavours to encourage Tillage with the utmoſt Expedition, even if it were not on Account of the *Indians* ſending Corn into *Europe*; becauſe *France* and *Ireland* now do it in the moſt exalted Degree, and particularly the laſt; whoſe diligent *Dublin* Society has found out Ways to drain their Bogs, and get excellent Crops of Corn, where neither Man nor Beaſt durſt formerly go on, leſt they were ſwallowed up alive. And can Tillage be better improved, than by Authors writing from their own, and other Experience. But how can this be done the beſt Way? Why, by giving ſuch Authors due Encouragement to enable them to hold ſerviceable Correſpondences, making Inſpections at Home and Abroad, and proving Things by chargeable Trials, for their conducing to the Good of the Public Weal; and thus capacitate this Nation, not only to vie with, but out-do all others in the Improvement of Huſbandry.

CHAP.

CHAP. XV.

The Copy of a curious Letter ſent to the Author from *Virginia*, ſhewing the Skill and great Induſtry of one of their chief Planters in Huſbandry Affairs.

Mr. WILLIAM ELLIS,

SIR,

YOU will be very much ſurpriſed at an Application made to you by a Perſon at ſo remote a Diſtance, which I can no otherwiſe excuſe, than by telling you, I have the ſame Inclinations to improve the Country that it was my Lot to be born in, as you may ſeem to have, by your Endeavours, to improve the Place of your Nativity; in order to which I am induced to deſire you to ſend me a proper Plough for a ſandy Soil that is naturally rich and good, and very level; and as I have found by Trials I have made, that Drilling of Grain is extremely agreeable to this hot Climate, I would deſire you to ſend me one of your three-wheel Drill-Ploughs, and a Horſe-Break, and ſuch of your Books relating to Modern Huſbandry, *as are already printed, except for the Month of* May, *which I have; and, as I find theſe Experiments anſwer, I ſhall make further Application to you.*

This Letter will be conveyed to you by Mr. *Jonathan Forward*, a noted Merchant in the *Virginia* Trade, who will receive theſe Things, and pay you your Price. He lives in *London*.

If it would not be too great a Treſpaſs on your good Nature, I ſhould be glad if you would be particular in giving me your Opinion in the following Branches of Buſineſs.

Imprimis, I have laid off a conſiderable Tract of about three thouſand Acres of Land, to be employed in Farming. I have adjoining a large Piece of ſwampy marſhy Ground, which is capable of great Improvements. Your Direction as to the Diſtribution of the Farm-land, and the Draining of my Marſh, would be of ſingular Service to me. I have alſo erected a convenient Malt-houſe, Brew-houſe, and Diſtilling-houſe, which ſeveral Callings I carry on within myſelf, though not with ſo much Succeſs, as I have Reaſon to hope I ſhall, with proper Information, having hitherto been only aſſiſted by my own Genius, and improved by ſome Obſervations I made when in *England*, at an Age when the Follies of Youth were predominant. I have lately read four Pamphlets relating to Brewing, which I take by the Stile to be your Performance; they afford me a great deal of Satisfaction, and I believe will prove very beneficial to me; and, if you can communicate any farther Obſervations, you will lay a great Obligation on me, and you may depend, if you give me Encouragement, you ſhall hear conſtantly of my Succeſs, and the ſeveral Stages of my Proceedings.

There is nothing ſo prejudicial to Mankind in general, as the Imprudence of Tutors, who continue, without Regard to the Genius of the Youth under their Care, to attempt nothing more than the making them Poets, or Grammarians; tho', by a more proper Method, without knowing one Word of *Latin*, many, that are whipped into Stupidity, might be made uſeful Members of Societies, and ſhining Ornaments to their Country. Were I to tell you the many different Trades I carry on with my Slaves, without any other Inſtructions, than I am capable of giving them, you would ſcarce have Faith ſufficient to depend upon the Truth of my Aſſertion. I am a Coachmaker, Carver, Carpenter,

ter, Cooper, Blackſmith, Maſon, Bricklayer, Millwright, Engineer, and many other Trades too tedious to enumerate: In which ſeveral Callings, beſides Planting and Farming, I employ near ſeventy Hands, and reap ſome Profit from every Branch, beſides my own Works I have in Hand. After what I have ſaid you will readily conclude, I was not calculated for a Poet, though my Maſter, like all other Fools, if I may call Scholars ſo, would never be perſuaded to entertain any other Opinion of me. I have a Machine in Hand; if it ſucceeds, I will obſerve further upon it, having as yet no other Conviction than what is apparent from my own Model. You will pardon this Trouble, and believe me to be a well Wiſher and Encourager of all public-ſpirited Men. I am,

Sir, Your moſt Humble Servant.

Rappa River, *in* Virginia,
Auguſt 23. 1742.

CHAP. XVI.

The AUTHOR's ANSWER.

The Author's Anſwer to the Virginia Letter.

SIR,

'YOUR ingenious Letter gave me no ſmall 'Pleaſure to find that there is a Perſon in *Virginia*, who has a true Taſte for Improvements in 'Huſbandry; I therefore more gladly embrace 'the Opportunity of correſponding with you, and 'now acquaint you, that, on the tenth Day of this 'Inſtant, I went to my Plough-maker, and beſpoke 'a three-wheel Drill-plough, and a Sort of Horſe-'break proper for your Soil, to be delivered for 'Embarkation, as Mr. *Forward* directed: Which 'Plough, by the Help of three little Boxes ſent

'with

'with it, and are to be made Use of according to 'the Grain you design to sow, will enable you to 'sow either Oats, Barley, Wheat, Pease, or Horse-'beans, in Drills out of a Hopper fixed over the 'Seed-box; and by their Sample or Model a Seed-'box may be made to sow *St. Foyne*-seed, Turnep, 'Cole, Clover, Trefoil, Ray-grass, Lucern, and 'other Sorts, to a very great Advantage; for it is 'only putting such Box on the iron Spindle of the 'third Wheel, as is wanted to sow such a Grain as 'best pleases you; and, as you are an Engineer, the 'Matter will be plain at one View, when you have 'a Sight of the three Sorts of Boxes sent you, which 'will direct you in the making any other that may 'be necessary for sowing *French* Wheat, Kidney-'beans, Tick-beans, Seeds of Pears, Apples, Rice, 'and many others, perhaps, that grow in *America*, 'and you may want to propagate in the Drill-Way, 'that we know nothing of in *England*.

The Improvement of Sandy Land. — 'As to the 'three thousand Acres of sandy Land, that you in-'tend to employ in the Farming Way, by sowing 'it with Corn, *&c.* it is such a Quantity of Ground 'as deserves a due Consideration how to improve it 'in the highest Perfection; because, as you say, it 'is naturally rich, and lies in a level Posture. It is 'the received Opinion of the most sagacious Far-'mers and Gardeners, that a true sandy, loamy Soil 'is the best Sort in *England* for producing the most 'plentiful Crops of Grains, artificial Grasses, and 'other Vegetables; and accordingly such Earth, 'about *Godalmin*, lets and sells for the most Money 'I ever knew any at the same Distance that *Godli-'man* or *Godalmin* in *Surry* lies at from *London*; 'and your sandy Ground, I find, may not be a 'great Way behind it in Goodness; therefore you 'are very much in the Right in thinking that the 'Drill-plough will best suit its Nature; for, as it is

'our

' our Study in many Parts of *England*, and our Con-
' trivance, to ſow even the large Horſe-bean in ſuch
' a Manner in our red ſurly Clays; that it may not
' be buried by being plowed in, and therefore we
' only harrow them in; ſo it on the Contrary con-
' cerns you to ſow your Wheat, Barley, Oats, or
' other Grain in ſuch a ſandy Soil at ſuch a Depth,
' as is ſufficient to hinder the too powerful Heats of
' the Sun from drying the Roots of Corn ſowed
' therein, to the Degree of Damage or Ruin. And
' this the excellent three-wheel Drill-Plough will
' do in the beſt Manner poſſible, with the Help of a
' Horſe-break; for theſe two Inſtruments give a
' double Security to the Grain: One by this Plough
' at Sowing-time, for, as the Seed drops out of the
' Box between the two broad Boards into the Drill
' or Thorough that the Share makes, this looſe
' ſandy Ground immediately falls in of itſelf from
' each Side, and fills up the Drills, ſo that there
' needs no more to be done to the Corn till it is got
' high enough up to want the Horſe-break. The
' other therefore is done by the Horſe-break, which
' will make a Tilth as it were between the Drills or
' Rows of Corn, by tearing or turning the Ground,
' to kill and hinder the Growth of Weeds, and give
' the Hand-hough an Opportunity of laying Earth
' on both Sides the Roots of ſuch drilled Corn, which
' will both ſhade and ſhelter, as I ſaid, the Roots from
' the Damage of Heats and Droughts, and at the
' ſame time give them a new Nouriſhment capable
' of bringing forth the greateſt of Crops, eſpecially if
' the Seed was firſt ſteeped or ſoaked in a Prepara-
' tion adequate to its Nature; for you may underſtand,
' that, as we ſay, *one Man's Meat is another Man's*
' *Poiſon*, ſo that Liquor or Preparation, which will
' nouriſh and bring forward a great Crop of Grain
' from one Sort of Seed, will, if another Sort is ſteep-
' ed or ſoaked in it, ſpoil it. Hence I take the Liberty

to

'to obſerve to you, that I am Maſter of a pretty
'many excellent and profitable Receipts or Secrets
'on this Account: As how to prepare Carrot-ſeed
'two ſeveral Ways, ſo that it ſhall come up in a
'much leſs Time, and with more Safety and Fer-
'tility, than when it is ſown in the common naked
'Way: Alſo how to prepare Turnep-ſeed either
'in the wet or dry Way, ſo as to prevent any Da-
'mage from the Worm, Fly, and Slug, and
'cauſe it to ſprout in a little Time. Both which
'Secrets are of great Importance to Farmers and
'others; becauſe Carrot-ſeed ſometimes has lain
'two Months in the Earth before it has ſhewed its
'Sprouts, and Turnep-ſeed ſix Weeks, to the Loſs
'of their Crop, or to the Damage of a late Growth.
'But what would Thouſands give to know an infal-
'lible cheap Way, that infallibly will ſecure a Crop
'of Turneps, Cole or Rape, Savory, Weld or
'Wold, and many other Field or Garden Vegeta-
'bles, from the Deſtruction of the Worm, Fly,
'and Slug in any Sort of Weather, let it be ever
'ſo wet or dry; which is what no one can pretend
'to be certain of, by the Uſe of Lime, Tobacco-
'duſt, or Aſhes, by reaſon of the Waſh of Rains,
'that oftentimes has proved ſuch powdered An-
'tidotes of little or no Value for this Purpoſe. I
'likewiſe make Uſe of a Compoſition for ſteeping
'of Beans of all Sorts, from the great broad *Wind-*
'*ſor*-bean, to the ſmalleſt Horſe-bean, or any Sort
'of Peaſe, that is ſo efficacious as to bring on an
'early Sprouting, prevent the common Deſtruction
'by Mice, and force on a quick Growth in the dry-
'eſt Seaſons; ſo that thoſe, who are obliged to ſow
'theſe late, may be as forward in their Crops, as
'thoſe ſown much ſooner; and, by the Help of
'ſuch a liquid Aſſiſtance, enjoy a ſurpriſing Im-
'provement, free of that Loſs that once accrued to
'a certain Gentleman; who, being deſirous to enjoy

a great

'a great Crop of Horſe-beans, was perſuaded to ſteep
'the Seed in a certain Liquor, and he did it accord-
'ingly; but he found himſelf deceived both in the
'Ingredients and in the Time of ſteeping the Seed;
'for great Rains, deſcending immediately after
'Sowing, the Seed burſt too ſoon, and rotted, to
'the Loſs almoſt of the whole Crop; becauſe, by the
'great Quantity of Liquor that the Beans had im-
'bibed, and the ſudden Fall of great and laſting
'Rains, the Seed had not Time to make a regular
'Rooting into the Earth, ſo as to ſecure the Crop
'from ſuch a fatal Diſaſter. It is in ſuch a ſandy
'Soil that I recommend to you the Uſe of my Salt-
'Petre Receipt above all other Soils, becauſe ſuch
'dry looſe Earth ſtands moſt in need of its ineſtima-
'ble Value for forwarding, ſecuring, and increaſing
'Crops of Barley in particular, beyond all other
'Inventions of this Kind, yet found out by the Art
'of Man, and which I am the ſole Publiſher of in
'Print; to be done by a Method that may be eaſi-
'ly comprehended by the moſt ignorant Ruſtic,
'and ſo cheap, that an ordinary Farmer may pur-
'chaſe the Ingredients. Here I ſtop my Pen, to
'tell the Difference of Mankind, whoſe Fancies, as
'the Verſe ſays, *differ like their Faces:* — *What*
'*one Man praiſes, another diſpraiſes.* —— It was in
'the Year 1736, that a Man carried ſeveral of my
'Models of new Ploughs about the Country, as
'the *Hertfordſhire* two-wheel double Share-Plough,
'made with a Crook in its Beam; the three-wheel
'Drill-Plough, and others, for giving Gentlemen
'and Farmers an Opportunity of inſpecting into
'their many and great improving Advantages that
'might accrue to them by the Uſe of ſuch Inſtru-
'ments in proper Soils, above and beyond what any
'other Plough in this Nation can perform at the
'cheap Rate they do. It happened that at *Beccles*, in
'*Suffolk*, there then lived a Clergyman, who poſ-

'ſeſſed a conſiderable Living, and who acted in the 'Commiſſion of the Peace: This Gentleman, be-'ing a Lover of Improvements in Agriculture, be-'came a Purchaſer at *London* of the firſt Book I 'wrote on Huſbandry, intitled, *The Practical Far-'mer*; wherein I inſerted the famous Salt-Petre, or 'Nitre Receipt, which he took the Hint of, and 'recommended it to a Gentleman in his Neigh-'bourhood for his following its Directions: How to 'ſteep Barley-ſeed, ſo as to make an Acre of well 'hearted Earth produce ſeven Quarters; and the 'Book happened to fall into right Hands; for the 'Gentleman put it in Execution on the firſt Oppor-'tunity, and had ſuch a Crop of Barley growing in 'his poor ſandy Land that ſurpriſed the Country, 'and brought People far and near to ſee it. How 'much his Return was at Harveſt I cannot ſay, be-'cauſe I never had an Account of it: But this I know, 'that it was the general Computation for that very 'long dry Summer and ſandy Country, four Buſhels, 'or what they call a *Coomb* there, was the general 'Product of an Acre of Land; becauſe, as they 'ſowed their Seed by Hand in this lean, dry, looſe 'Ground, the Roots of the Barley were eaſily 'parched and dried up; yet, though the Gentleman 'ſowed his ſteeped Barley-ſeed in this Manner, I un-'derſtand he muſt have had a great Crop of Barley 'by its green Sight in the mid Part of the Sum-'mer, even eight or ten Times more than his 'Neighbours, who ſowed their Barley-ſeed in the 'dry and naked Way: Which Crop was of the 'more Value to the Owner, becauſe, this Grain fail-'ing almoſt every where this Summer in as great 'a Degree, perhaps, as ever was known, it gave 'him an Opportunity of ſelling his Barley at a very 'high Rate; ſo that, in Courſe, he muſt get well by 'his courageous Venturing on a new Method, that 'advances a ſmall Charge for a great Profit. This

'encouraged

'encouraged the good Parſon to lay out three Shil-
'lings and ſix Pence in other Books of my Writing
'that the Man ſold, for the further Improvement
'of Huſbandry. From hence the Man travelled on,
'and in his Travels after ſome Days, accidentally
'ſeeing a Gentleman, who, it ſeems, was a *Londoner*,
'ſtand at his own Door, he offered his Book to
'Sale, with the Sight of one of his Models; which
'moved the Gentleman into ſuch a Paſſion, that he
'ſaid, —— *D—n ye, what do you come into this*
'*Country for, I'll ſoon have you taken up*; which
'put me in Mind of what a Militia Captain ſaid to
'a Soldier of the Guards, who happened that
'Day to ſupply a Man's Room in his Company,
'when they muſtered the Trained Bands; they
'aſked this Man his Name, and what he was, he
'anſwered, *a Soldier*. Oh! ſays the Captain, *I will*
'*have no Soldier in my Company*. —— But what
'was almoſt, or, indeed, more ſurpriſing than this,
'the Man had not travelled above two Miles from
'this Place, before he came where there was a
'great Concourſe of People aſſembled about an Inn:
'On his aſking what was the Matter, they told
'him there was that Day a great deal of Sport
'to be performed on a Common juſt by— As ſoon
'as the Gentleman had dined. Upon this the Man
'gets into the Preſence of them; and, when they
'ſaw his Plough Models, they looked on them very
'earneſtly, but did not buy any of his Books, nor
'ſo much as aſk him to drink; which provokes
'me to ſay further, that it was the more ungrate-
'ful, becauſe it happened to be in a ſandy Country,
'that ſtood moſt in Need of artificial Helps from
'both the double and the three-wheel Drill-
'Ploughs; from the double Plough, becauſe in this
'light looſe Earth four Horſes would plow double
'the Quantity of Ground in one Day, that their
'Jocky Wheel-Plough can, and in a far better
'Manner than that does; for this Plough, by its

'two Shares, makes very narrow Thoroughs, or 'Furrows, which is much better for the Increaſe of 'Crops of Grain, than when one large Thorough is 'turned by the ſingle Share-Plough. Hence come 'the old but true Saying, — *The more Furrows, the 'more Corn*: — ſo that it is their own Fault, if 'their County did not reap the Advantage of many 'Thouſand Pounds Value in one Year, by the Uſe 'of one or both of theſe Ploughs, becauſe theſe do 'moſt Service in light Earth; and alſo for 'that beneficial Way of ſowing ſteeped Barley, 'which is a new Improvement that is more neceſſa-'ry to be followed in the two Counties of *Norfolk* 'and *Suffolk*, than in any other two Counties, I am 'of Opinion, in all *England*, becauſe of the many 'Thouſand Acres of ſandy Land that lie in theſe 'Parts; an Earth, as you obſerve, that certainly 'receives the greateſt Advantages from the Drill 'Huſbandry; and alſo from Corn firſt ſoaked in ſome 'Liquid, for preparing it to be ſown in the Spring 'and Summer Seaſons. And ſo neceſſary and pro-'fitable is the new Way of preparing both Field 'and Garden Seed, that, in my humble Opinion, 'the Subject deſerves a particular Treatiſe to be 'wrote on the ſame, of which I intend to make a 'further Obſervation hereafter. Now by theſe two 'great Advantages of firſt ſoaking Barley and other 'other Seeds, and ſowing them in the Drill Way, 'Farmers, who occupy ſandy, chalky, and other 'light Earth, moſt ſurely ſtand a double Chance, 'and far better of enjoying a full Crop of Grain, 'than when dry Seed is either plowed or harrowed 'in; becauſe, by drilling in the Seed, it lies at ſuch 'a ſafe Depth in the Ground, as to be defended 'againſt the greateſt Degree of Heat from the Sun; 'and more as the Roots of the ſoaked Seeds receive 'the additional Help of more Earth being houghed 'up and laid on them, free of the common Danger of

'burying

'burying Seed by plowing it in, which often happens in a great Degree, as the Earth is more or less of a stiff Nature. To this I add, that as you are an Engineer, and skilled as a Mechanic in Smiths, Carpenters, and Wheel-wrights Works, you will easily make these plain three-wheel Drill Ploughs and Horse-breaks; Instruments that may not only be of prodigious Service to you, for increasing Crops of Grain, but likewise give you an Opportunity of making a considerable Profit from the Make and Sale of them, as a new Branch of Merchandise. But for more of this Plough and Horse-break, and for improving Land by Manures and Dressings, *&c.* I must recommend to you to the Perusal of my several Books already written, and those I intend to write and publish; for, if I was to attempt a full Account of such Matters to you by Letters, it would employ my Pen in writing several Sheets; and therefore I shall hasten to what I have to write, in Answer to the Improvement of your Marsh Land.'

The Improvement of swampy Land. — There are several Ways to improve swampy and marshy Lands: First, by making Channels or Water-ducts under Ground, and this even where the Earth lies in a level Surface, by cutting such Aqueducts in a descending Posture, as to cause its Water to fall into a Receptacle or Reservoir capable of discharging them, which is commonly either a Ditch, Pond, or River: And to such an Art have many arrived on this Account, that there are Thousands of Acres made to bear the best of Corn, that formerly were not capable of being plowed, for the great Quantities of Water that frequently lodged on the same. In *Lincolnshire*, *Bedfordshire*, *Kent*, *Essex*, and in many other Parts, there have been Thousands of Acres recovered from the Damage of Sea-Floods and other Inun-

Inundations of Waters, by making of Bank-Fences againſt their Rapidity, and by cutting Drains under Ground for carrying off the Swell of ſuch Waters, and preventing the like Misfortunes for the Time to come. I know an ingenious Gentleman in *Eſſex*, that every Year lays out about fifty Pounds in cutting of ſubterraneous Drains, and thus delivers his flat ſwampy Fields from thoſe Waters which formerly uſed to lie on his flat ſtiff Grounds, to the hindering it from bearing tolerable Crops of Grain; but, ſince he has thus made Improvements by cutting Drains, he has as good Crops as any; for here the Plough goes over theſe Aqueducts as free and ſafe, as if there was no ſuch Operation performed in the Field; and this by the Method of proceeding I have publiſhed in my former Works; and of making Sea-Banks, which you will perceive when you come to peruſe my Monthly Treatiſes.

A ſecond Way to improve ſwampy Land — Is by ſowing it with the Seed of thoſe Vegetables that is proper for it, as I intend to give an Account of in the Month of *February*.

A third Way of improving ſwampy Land. —Whoever thinks fit to follow the antient Way of denſhiring, or improving Land by burning its Turf, may, but of late many refuſe it. If they will burn it, it muſt be firſt plowed; and, if the Earth be of the ſtiff Sort, it ſhould be burnt in a Clamp; but, if it be of the light Sort, then it is better burnt in Heaps in the Field. The Author of improving wet and barren Lands ſays, that, by burning the Ground two Inches thick, there will be two Hundred and ſixty Loads of Aſhes to an Acre; and, by burning it three Inches deep, there will be four Hundred Loads to an Acre. It is true ſuch Burning will clear the Land of Weeds and all Manner of Trumpery; but Woe be to the Farmer after the Aſhes have been ſpent, which will be, as he ſays, at three Years End; for then will come on as great a Barrenneſs as the Aſhes cauſed

Fer-

Fertility; and this for I know not how long, becauſe the richeſt Part of the Ground, which is the Turf or Surface, is gone. Hence it is, that ſo many refuſe to burn their Turf to enrich their Land, and becauſe moſt Ground ſtands in need of thickening its Surface, rather than thinning it, eſpecially where a hurlucky Chalk, or red or yellow Clay, or Springs, *&c.* lie very near the Top Part; and for this Reaſon it is, that Dung is ſometimes allowed to do the greateſt Service to ſome Land, becauſe this thickens it, when powdered Manures add nothing to its Swell.

A fourth Way of improving ſwampy Land — Is to be done by planting Oſiers and aquatic Trees, of which there are ſeveral Sorts, too long to give an Account of here: Therefore I ſhall be very ſhort in what I have to ſay on this Head. The many fine Rows of Alder Hedges that grow between *Hempſtead* and *Watford*, in *Hertfordſhire*, would eaſily convince any knowing Perſon, on Sight, of the great Profit belonging to them, in their not only becoming one of the ſtrongeſt Hedges or Fences, but alſo by their growing into very many large high Poles in nine Years Time. Another Improvement of ſwampy Land is to be made by planting the drier watery Sort with Oſiers and Willows, as the more moiſt Ground is by planting it with White-wood, Poplar, Elm, *&c.* But of theſe more in the Month of *February*. I find by what I heard at Mr. *Forward*'s, that you ſent to him to help you to ſome Summer Barley, and that he is furniſhed with the ſame by the Corn-Chandler. It is poſſible you may have the right Sort ſent this Way; but I am of Opinion, it is ten to one againſt it; for I never knew a *London* Corn-Chandler ſell this Sort in particular, as being a lean thin Kernel, and therefore not agreeable to the *Londoner*, who commonly covets a full-bodied Kernel for feeding their Cocks, Hens, and other

other Uſes. Whereas, as I ſaid, the Rathripe Barley comes off a ſandy loamy Ground in a lean Kernel; but, being ſown in a ſtiffer Soil, it makes the next Year the beſt Malt, as being multiplied in a Kernel of a much larger Size; yet, if it is ſown above twice in ſuch a ſtiff Soil, the ſame will degenerate into a thick-ſkinned ſmall Kernel. But this Misfortune may be very much prevented, by your ſowing the Barley-Corn alternately in your two different Sorts of Earth, which is a Happineſs that Thouſands would be glad to enjoy, and cannot. This Rathripe Barley-ſeed I have ſent into *Cumberland*, *Yorkſhire*, and other Parts, for its early ripe Quality in theſe Northern Counties.

CHAP. XVII.

The Copy of a Petition ſent to a Member of Parliament, on Account of exporting Corn *from* America *into* Europe.

To the Right Worſhipful the Knights, Citizens, and Burgeſſes in Parliament aſſembled,

The humble Petition of WILLIAM ELLIS, *and other Farmers in* Hertfordſhire, *in Behalf of themſelves and all the Farmers in* Great-Britain,

SWEWETH,

THAT your Petitioner WILLIAM ELLIS, having lately received an Order for ſending over to a chief Planter in *Virginia* ſome new Inſtruments of Huſbandry, for improving great Quantities of Corn Land, he is informed of their prodigious Endeavours to increaſe this Trade, by cutting down every

every Year Abundance of Wood, ſowing the ſame Ground with Grain, and exporting their Wheat, *&c.* into *Europe*, where they ſell it at thoſe Places, which always have been the *Britiſh* Farmers Markets; and this Trade they carry on every Year more and more: And whereas *France* and *Ireland* of late have given greater Encouragement for Tillage than ever, ſo that in Courſe they will be the better capacitated to export Corn to *Portugal*, *Spain*, *Italy*, and other Parts, which increaſeth the Evil: If therefore a ſpeedy Stop is not put to the Importation of Corn into *Europe*; it will neceſſarily be the Means to cauſe Rents to fall, and, perhaps in Time, diſable Farmers from paying any.

Your Petitioners therefore humbly beg, that this auguſt Houſe will take the Premiſes into their Conſideration, and prohibit the Exportation of Corn from *America* into *Europe*, and other Things that may prejudice the *Britiſh* Farmer and Tradeſman; for that, in *Penſilvania*, *New-England*, *Virginia*, and other Plantations, they have now about a Thouſand Ships, ſome of which are not only employed to carry Corn, but alſo by that Means hinder the Freight of *Britiſh* Ships to the *Weſt-Indies*, and elſewhere, as that orthodox Author has made appear in a Pamphlet, intitled, *The Landholder's Companion*, wrote by *William Allen*, of *Fcbſtone*, in *Pembrokeſhire*, Eſq; printed in 1742.

And your Petitioners ſhall ever pray, &c.

CHAP. XVIII.

The Copy of a Letter sent to Sir John, *of the North, setting forth the infinite Damage that Importation of* Wheat, *&c. from* America *into* Europe *does* Great-Britain.

SIR,

'THE Honour that you have done me in condescending to visit me from a remote Part of *Great Britain*, for giving me Leave to hold a Correspondence with you, in order to improve the Knowledge of Husbandry, has emboldened me to present you with the Copy of a Letter I lately received from *Virginia*; wherein is contained a Commission for my sending the Person a Drill-Plough and Horse-break, to enable him the better to carry on the Farming Business, by improving his sandy Land in the highest Perfection; which may be certainly done, by the Help of these Instruments, Steeping of his Seed, and other Managements, that he will be apprized of from my Monthly Writings: This I make no Doubt of, as he is a very ingenious and great *Virginia* Planter; I call him *great*, because his Father was accounted the chief Planter in these Parts; and *ingenious*, by Reason he manifests himself to be an Engineer, as being, in some Degree, Master of many Mechanic Arts, for which he deserves high Commendation. Accordingly I have faithfully executed his Orders in sending him the famous three-wheel Plough with its Horse-break; and which I ought to do in the best Manner possible, by Reason he was so generous, as to give me Leave to make my own Price, which was more than ordinary obligatory on me for using him reasonably. Now I suppose this Person will take it ill at my Hands for making

this

this Uſe of his Letter, and turning the Contents of it againſt himſelf and his Country; but I am too much attached to the Intereſt of my own, to give up any of its valuable Branches to ſuch Reſentment, as my Country's Welfare ſtand in Competition with; and therefore I ſhall proceed to obſerve to you,

'That I am told, theſe *Virginian Americans* annually make great Acquiſitions in ſeveral of their Colonies, or Counties, by cutting down Wood, and converting the Land to what Uſe they think fit; and this by ſuch a Right, and in ſuch a Manner, that every Acre of Land becomes their Freehold. And altho' *Virginia*, for a long Tract of Years after its firſt being inhabited by the *Engliſh*, was chiefly employed in the Produce of Tobacco, yet of late Years, by their great Increaſe of Land, they have been tempted, as well as thoſe who live in *Penſilvania*, and other Parts of *America*, to carry on the Cultivation of Corn, and have made ſuch Progreſs in its Improvements, that they are become Maſters of prodigious Crops of Grain, eſpecially the fineſt of Wheat, by enjoying, perhaps, one of the beſt Opportunities the World affords, to advance their Intereſt by it: That is to ſay, they have the richeſt of Land both dry and wet, a very potent Influence from the Sun's Heat, their Acknowledgement or Rent, little or nothing, their Slaves labour for a Trifle Charge, and withal the great Cheapneſs and Conveniency of Water Carriage for tranſporting their Corn into *Europe*, to the infinite Prejudice of *Great-Britain*. The Conſideration of which, I am of Opinion, is a Matter of the higheſt Importance to this Nation, as I hope to make appear by what follows; and, in order to it, I ſhall quote ſome Paſſages out of what that truly orthodox Author *William Allen*, of *Fobſtone*, Eſq; in *Pembrokeſhire*, has wrote on this Subject in his

'Pamphlet, intitled, *The Landholder's Companion, or 'Ways and Means to raiſe the Value of Land.*' And firſt I ſhall begin with inſerting ſome Lines of his Preface, *viz.*

"When any Branch of Trade has been declining, "ſome generous-ſpirited Man, or other, or ſome "hireling Writer has commonly endeavoured to re- "ſtore it to its former Proſperity. When the Inte- "reſt of our Landed Men is under Diſtreſs, it ſel- "dom meets with the ſame good Fortune. What "to impute it to may, perhaps, be too tender a "Point for ſome Sort of prudent Men to diſcover; "that is, thoſe who are afraid of mentioning a pub- "lic Fault, through Fear of offending the Public; "however, I will venture to ſay, as Truth cannot "give any juſt Offence, it is to an Ignorance of "our Conſtitution and Landed Intereſt, or to Gen- "tlemen of Judgment ſuffering Faction, or abſtruſe "and curious, more than practical Parts of Science "to ingroſs their Time. All the Hints and Diſ- "courſes I have ſeen, concerning the Landed Inte- "reſt, are falſe Lights. The firſt Sort of Know- "ledge capacitates to judge of Things with more "Depth and Accuracy, than it could otherwiſe: "But what *Seneca* ſaid, *of the Syſtems in the Art of "Reaſoning*, That they ought to be looked into, but "not conſtantly followed, is properly applicable to "ſuch Purſuits. I wiſh that thoſe, who have a Ca- "pacity to ſerve their Country, may paſs juſt Re- "flections on ſuch Differences. Our young Gen- "tlemen, who delight in Reading and Meditation, "commonly employ themſelves in Mathematics, "and Philoſophy. When they arrive at Manhood, "the Pleaſure, which Cuſtom has cauſed, hood- "winks them from obſerving thoſe Methods and "Studies, which would enable them to do Social "Acts of Kindneſs to their Countrymen. Searching "after, and Laying down practical Plans for the

"Good

" Good of their Brethren, would be a happier " Way of giving an Account of thoſe Talents and " Leiſure Providence bleſſes them with. It would " rejoice me more to benefit the Community I am a " Member of, than to know all the Propoſitions " and Problems of *Locke* and *Newton*; and, in my " Judgment, the compleat Knowledge in Trade, " *&c.* requires as much Labour and Attention, as " any of the Arts and Sciences. The Corn Affair " being a Subject of the moſt Importance to the " Generality of Landlords and Tenants, I have " ſtudied it with the utmoſt Aſſiduity and Exactneſs " I could, and hope it will not be liable to many " well-grounded Objections. All that I have fur- " ther to obſerve is, that if the *Grecians* did not act " wrongly in favouring Authors, who endeavoured " to contribute to the Proſperity of their Country, " (which was Candor and Greatneſs of Nature, wor- " thy of the Imitation of all Nations) I flatter my- " ſelf, that theſe Sheets will meet with the Indul- " gence of my Countrymen-' — Thus far his Pre- face. And then begins his firſt Chapter, thus :

' *Conſiderations on the Reaſonableneſs and Neceſſity* ' *of advancing the Farming Intereſt, particularly the* ' Corn *Trade.* — The Intereſt of our *Britiſh* Land- ' holders has been declining ſeveral Years laſt paſt: ' It has been a general Obſervation, that Rents have ' been ſinking, and Tenants unable to make as good ' Payments as formerly, even in Counties where ' there is the greateſt Circulation of Money, the Ma- ' ritime ones, and thoſe near the Capital Cities of ' the Kingdom. As this is too well known to be ' their Caſe, they deſerve the Attention and Favour ' of our Legiſlature: It is proper they ſhould make ' a tolerable Intereſt of their Money, as well as Ad- ' venturers in other Buſineſſes; which few of them ' do, who have not enjoyed their Bargains twenty ' Years,

' Years, or a longer Time ; for Lands are much
' dearer now. Though Grain has borne a good
' Price lately, it has not been high enough for ſuch
' Purpoſes, nor for making them Satisfaction for
' their Loſs in the Years preceding this Year and
' the laſt. On the Suppoſition that Barley, Peaſe,
' and Oats had ſold as dear as Wheat (I mean in
' Proportion) they would have been now in a to-
' lerable Condition ; but the Caſe has been other-
' wiſe, the Price of thoſe Grains, this Year and laſt,
' has been too low : Before they can pay their Rents,
' *&c.* (which are generally high) Wheat of middling
' Goodneſs ought, I think, to ſell for about four
' Shillings and three Pence *per Wincheſter*, not in a
' few Places, but throughout the Kingdom. Barley
' for Half a Crown, Peaſe two Shillings and three
' Pence, and Oats eighteen Pence *per Wincheſter* ; I
' know in former Times leſs Prices were ſuffici-
' ent ; but, as Circumſtances alter, the ſame Thing
' is altered. Let it not be thought there is no Ne-
' ceſſity to ſupport and add to the preſent Prices of
' Grain, becauſe Wheat has been ſo high, and high-
' er in ſome of the principal Cities of the Kingdom ;
' for the other Grains have generally been ſold for
' much lower Prices, than the above, for much of
' them has not been exported. And Wheat this Year
' and laſt, 1734, never mounted yet, in ſome of the
' extreme Parts of the Kingdom, to above three
' Shillings and eight Pence *per Wincheſter* : Barley is
' now ſold in the *Weſt* of *England*, for two Shillings
' *per Wincheſter* Buſhel. It has been leſs there this
' Year, and very low in other Places. Prices are
' often higher fifty Miles round *London* than elſe-
' where ; which induces ſeveral great Men to think
' the Countrymen live better than they really do.
' Country Meaſures (which are frequently larger
' than the *Wincheſter*, or legal Buſhels) contribute
' farther to ſuch Miſtakes. Corn Farms (Timber, I-

' ron,

'ron, Harveſt-People, and Servants [weighty Arti-
'cles of Expence] being much dearer than in former
'Times) will not yield ſufficient Profit to the Oc-
'cupiers of them, unleſs they can have ſuch Prices;
'particularly as Cattle, Pigs, Sheep, Butter, and
'Cheeſe are now one third Part cheaper than former-
'ly, and what is called a *living* Price. If what is ſaid
'about the Expence of Farming, being greater than
'formerly, is conſidered, it muſt be allowed (by
'thoſe who underſtand Country Affairs) that a Te-
'nant in a Corn Farm muſt make near three Rents
'and a half of his Tenement, beſides a Reſervation
'of Seed-corn for the following Year, to enable him
'to live as he ought; and that one of thoſe Rents
'ſhould ariſe from the Stock and Dairy Profit; (there
'are ſome ſmall Variations in *England*, *Wales*, and
'*Scotland*; but my Calculation is in the general.) A
'due Weighing of the additional Expences, with
'the Abatements in Profit, will prevent the Prices, I
'mentioned, being thought very unreaſonable, be-
'cauſe the Tenant is to pay out of what he ſells
'his Landlord's Rent, Tythe, Manurement, neceſ-
'ſary out-going Expences of various Kinds, and a
'reaſonable Proviſion for his Family. The flouriſh-
'ing Condition of the Landed Intereſt ſupports all
'Trades: Moſt Trades now, except thoſe which
'ſupply Luxury; thoſe of Gold and Silver Smiths,
'Lacemen, Vintners, Painters, Dealers in Silks,
'Velvets, and high priced Cloths (which the unac-
'countable Luxury and Emulation among our Peo-
'ple encourage and ſupport) are under an apparent
'Decay; which is not only proved by the general
'Declarations of Tradeſmen, but by two many In-
'ſtances of Bankrupcy amongſt them. I wiſh I
'could ſay the preſent Times are not the worſt,
'Our Exports are, perhaps, as great as formerly;
'whence then all this Complaint? Our Farmers
'are *worſe Cuſtomers than formerly*; Neceſſity has
'obliged

'obliged them to more Carefulneſs and Frugality 'in laying out their Money, than they were accuſ- 'tomed to in better Times. The Home Conſump- 'tion of our Manufactures is much greater than 'our Exportation; judge then, how largely the 'Landed Man deals in them. Now, if *his Income 'leſſens*, he becomes *a worſe Cuſtomer to Tradeſmen 'than he would otherwiſe be.* I have known Tradeſ- 'men of a middling Claſs *obſerve*, that their *Sale 'Accounts were too well acquainted with thoſe Sorts of 'Truths*; nay, in the cheap Years, I have *heard 'them ſay, they wiſhed the Price of Grain high.* He 'goes on at Page 12, and ſays, that *Flanders* being 'now in Peace, and a Country where a great deal of 'Money and good Management abound, eſpecially 'as the Inhabitants are accounted the beſt Farmers 'in the World, *muſt rob us of a great many of our 'Markets.* I have ſeen it noted in ſome Accounts of 'this Country, That the Farming, the Meaſuring 'of Corn in the City of *Antwerp*, formerly was ſet 'at 100,000 Crowns yearly. As we may well allow 'vaſt Quantities of Corn to be ſent to Foreign Mar- 'kets, as well as what we have for that Purpoſe, I 'think it appears by what has been ſaid, that we 'ſhould give all proper Encouragement to our ex- 'porting Grain, and be always jealous of others 'getting Foreign Markets from us. The chief Po- 'licy of a Government in its Commerce is, to ſup- 'port that Buſineſs which is not only beneficial in 'itſelf, but Conſequences. The Corn Trade, being 'a bulky Commodity, *profits our Navigation*, as 'well as *our Manufactures*, as ſignified before; and 'Foreigners in the Prices they give for our Corn 'do, in Effect, pay our Freights. *Ireland* is now, *by 'Act of Parliament*, enlarging its Tillage; the 'Landholders here are compelled to plow *certain* 'Quantities of Ground; and, if the Succeſs is as 'great as may be reaſonably expected, it will be

'our

'our Corn-Trade's Funeral; for the Plantations 'have already given it a deadly Stab, by ſending '*wonderful Quantities up the Streights, and* to *Liſbon*, 'formerly Benefit-Places to us. How few then muſt 'our Markets be, and how low our Prices? Con-'ſequences muſt enſue, which will demand the At-'tention of every Landholder of *Britain*. As Salt 'is very cheap in *Ireland*, there is no great Expec-'tation of the Farmers getting much by Cattle, *&c.* 'therefore the Legiſlature, with Submiſſion, would 'do well to think of proper Means to raiſe and 'preſerve the Price of Corn, as before hinted; par-'ticularly as there have been ſeveral Thouſand Acres 'of Wood-lands and Sheep-walks plowed up very 'lately. To turn ſuch Lands to Sheep-walks again 'would be avoiding *Scylla*, to go to *Charybdis*. I 'have ſeen a great Part of our Kingdom, and have '*made many Obſervations* (according to the beſt of 'my Capacity) on the *Trade and Huſbandry* of it: 'I do therefore know there is more than double the 'Land under Corn now, than formerly, which ought 'to increaſe our Concern for it, as the *primum Mo-'bile* of all our Buſineſſes. Now is the Time to re-'lieve the poor Farmers, that they may recover their 'paſt Loſſes, and be free from the like Preſſures 'for the Future. If Care is not taken now, do not 'let us wonder hereafter at the Fall of our Rents: 'Certain Cauſes will be attended with certain Events 'now, as heretofore. If our Fathers ſuffered Ship-'wreck by Careleſneſs, let us not commit the like 'Error. Dr. *Swift* ſays, *Engliſhmen can feel, but 'not ſee*. If we ſupport our Corn-Trade, Money 'will be plenty among all Ranks of Men; and, per-'haps, it is better to cheriſh effectually a few of the 'greateſt Trades (whereby we may get the better 'of other Nations) than to ſtarve all by ſmall in-'effectual Helps to all. If we act in this Manner, 'there will not only be a new Acceſs of Money, but

' Foreigners will leave their Money in our Funds, ' with Contentment to them and us, and the general ' Rental and Strength of the Kingdom will be en- ' larged; then we ſhall continue raiſing large Quan- ' tities of Grain, without any Fluctuation of Buſi- ' neſs; which People in Neceſſity are apt to ſubmit ' to, and very often for the worſt; and then, if our ' neighbouring Nations happen at any Time to ' have great Wants of Corn, it may be ſaid of us, ' as Sir *Walter Raleigh* ſaid of the *Dutch* and ſome ' of the *Hans* Towns, that, by the Sale of Corn in ' ſuch Years, they uſed to be enriched for ſeven ' afterwards. If we extend what the Knight ſays ' elſewhere, according to Proportion, we may think ' he was right in what he ſaid; for he has obſerved ' that they drew for Corn out of *England*, in one ' Year, 2,000,000 Pounds Sterling. At that Time ' our Nation was little more than above one half as ' populous as it now is. Now there cannot be any ' thing more beneficial than the Proſperity of this ' Trade, nor more dangerous than the Non-encou- ' ragement of it. Innumerable are the Diſtreſſes of ' our Farmers, even among thoſe who may be ' preſumed to have good Bargains. The Inadver- ' tency of great Men, and the Arts of Stewards, in ' granting Bargains, prove that ſuch Men's Eſtates ' are commonly cheaply rented; and yet many ca- ' lamitous Complaints are amongſt them: All I ſhall ' now obſerve is, a certain Duke would have had a ' great deal of his Eſtate given up to him, if he had ' inſiſted on having his Rents. Another noble Duke ' (according to my Information) has vaſt Numbers ' of his Tenants, who owe him three Years Rent.'

Then he afterwards proceeds on

Conſiderations on Methods of relieving our Land-holders. — ' At Page 21, he ſays, It would be better ' to advance the Sale of our Beef, Butter, and ' Cheeſe, by encouraging Foreigners to take them

' from

'from us, inſtead of the *Iriſh*, by giving proper
'Bounties. There is a Neceſſity for their being lar-
'ger; for the *Iriſh* Meat is ſalted much cheaper
'than ours; two third Parts of the Salt they uſe for
'Foreign Conſumption, is ſold after the Rate of
'four Shillings *per* Hundred. — Smuggling *Iriſh*
'Meat, *&c.* into *England* is very common (and
'much to our Detriment) particularly ſince the Re-
'vival of the Salt Duty; among innumerable In-
'ſtances of ſuch Practices, I have Reaſon, if my In-
'formation is true, to think that a Merchant, that
'employs thirty or forty Ships yearly, victuals them
'chiefly with *Iriſh* Proviſions. I intimate ſo much
'to ſhew the Neceſſity of enacting ſeverer Laws,
'than we have at preſent, againſt Smuggling *Iriſh*
'Meat, *&c.* As our Kingdom is an Iſland abound-
'ing with Havens, we ſuffer very much thereby,
'particularly in the Weſt and South-Weſt Parts of
'it. It would be a Service to our Land-holders, if
'our Ships going to *Newfoundland*, and other Parts
'of the *Weſt-Indies*, were hindered from victualling
'in *Ireland*. — The Northern People raiſe Corn
'cheaper than we do; Labour is not as dear with
'them as with us. From them chiefly the *Dutch*
'are ſupplied with Quantities for their Markets at
'Home and Abroad. Now, to enable us to reap
'more Advantages by our Corn-Buſineſs, it will
'be neceſſary to enlarge our Bounty-Money. The
'Bounty for Wheat ought to be, I think, ele-
'ven Pence (eight Gallons) for Barley five Pence
'Half-penny, and other Grains in an advanced Pro-
'portion. The Sinking-Fund, or ſome hereafter
'mentioned, may in Part be applied to ſuch
'Uſes. It is an uſual Thing for a Trading Nation,
'when any Branch of its Buſineſs (does not Corn
'deſerve as much Favour as other Commodities?)
'is not on an equal Footing, as it is elſewhere, to
'aid it with ſufficient Bounty-money: If we give

'too little, other Nations will find Markets, when 'we cannot. — Another Relief may be brought 'about by encouraging the Exportation of Ale and 'Beer; for at preſent, he ſays (at Page 35) he finds 'no large Quantities are ſent out of *England*, which 'is probably owing to too little Encouragement from 'our Laws, and lays down ſeveral other Reaſons for 'this Purpoſe. After theſe Reaſons, he adds, that 'our *Engliſh* Tillage, ſince the dear Year of Corn '(ſix Years ago) is ſo great, that a Scarcity of Corn 'at Home again cannot be well feared; and there-'fore we ſhould have our Exportations highly en-'couraged. If our Colonies of *New England*, *New* '*York*, and *Penſilvania* were hindered from export-'ing to *Barbadoes*, *Jamaica*, *Virginia*, and ſome 'other of our Southern Plantations, eſpecially as 'we might, as well as they, ſupply the *Spaniſh Weſt-*'*Indies* with Flour, *&c.* (by the Way of *Jamaica*) 'our Corn-Markets would infallibly riſe. The In-'habitants of the Colonies, following other Buſi-'neſs, have great Want of Corn. Our Indolence 'heretofore (I wiſh, ſays he, it may not continue) 'has been a good Benefit-Ticket to them. We 'ought to prevent Exportation of Corn, *&c.* out of 'our Plantations, particularly to any Parts of *Eu-*'*rope*, ſome of their Ground being not, probably, 'plowed ſince the Creation, till this Age throws out 'immenſe Quantities of Grain, and they follow the 'Corn-Trade chiefly, except *Virginia*, *Jamaica*, and '*Barbadoes*. I have been informed by one who has 'been in *Penſilvania*, that there are between two and 'three hundred Ships chiefly employed in carrying 'Corn from thence Year after Year to the *Streights*, '*Liſbon*, our Tobacco and Sugar Colonies, and to '*Ireland* very often. — To prevent their Exporta-'tion from the Northern Colonies, they may be 'obliged not to till more Ground than the Legiſla-'ture ſhall think proper for Home Uſe. Then, in

Times

'Times of Scarcity, they themſelves would be our 'Cuſtomers. As we could have Freights Home 'from our Colonies, we could ſend Corn there cheap-'er, and conſequently oftener, than other *European* 'Corn-Dealers: However, others ought not to be 'allowed to ſhare ſuch a Trade with us. Again, 'he finds Fault with the Liberty the *Dutch* take to 'import Corn into *Ireland*, to our Prejudice; for, 'he ſays, the Hiſtory of *Holland*, in two Volumes, 'Octavo, gives us an Account, that the Hundredth 'Part of Corn the *Dutch* export, is not their own 'Growth. But, to return to the Plantations, their 'Ships coming to *Ireland*, *France*, *Spain*, and *Por-'tugal*, with Corn, hurts all our Manufactures, as 'well as our Farmers; thereby, they carry Home 'the Manufactures of thoſe Nations, to ſupply their 'Wants: Moreover, it is well known, that the '*Dutch*, for Cheapneſs of Freight, frequently hire 'our Plantation-Ships from the *Mediterranean* to '*Holland*. Then as the *Dutch* work ſeveral of their 'Manufactures cheaper than we do, and only half 'Freight being to be paid Homewards, the *Dutch* 'Manufactures and *India* Goods are bought cheap-'er by the People of our Northern Colonies, than 'ours when we export them thither.—— The wiſe '*Spaniards* and *Portugueſe* do voluntarily hinder 'their Plantations in *America* to interfere with the 'Manufactures which are made in *France* and *Eng-'land*, as well as with thoſe which are made in '*Spain* and *Portugal*: Surely then there is much 'more Reaſon for us to prevent our Colonies going 'on with their Corn-Trade. There are other Com-'modoties ſufficiently profitable, which may em-'ploy them fully, without Injuring us. The ho-'neſt judicious Quaker, *Joſhua Gee*, who deſerves 'a Monument to be erected to his Memory for his 'Book on the Trade and Navigation of *Great-Bri-'tain*, has told us what they are, *viz.* Hemp, Flax, Raw-

'Raw-ſilk, Iron, Pot-aſh, Ships, Cochineal, raiſing 'Indico, planting Cocoa Nuts, *&c.* And hence 'makes a marginal Obſervation by the Way, and 'ſays,

'*How remarkable* Lewis the XIVth *was, for re-* 'warding valuable *Authors.* — At Page 47, he 'writes thus: *Lewis the* XIVth was very remark- 'able for rewarding valuable Authors: Such Men 'are profitable Members of the Common-wealth. '*Peter the Great* of *Muſcovy* had the ſame Way of 'Acting: He honoured and favoured ſuch Sort of 'Men liberally, and of his own Accord: He 'eſteemed them as Benefactors to himſelf and Peo- 'ple; and, as a Pamphlet Author on Wool ob- 'ſerves, *Nothing is more reaſonable, than that every* 'Man *ſhould receive Protection and Encouragement* 'from the *Legiſlature, as they contribute to the real* 'Welfare and *Happineſs of their Country.*

'*How the Northern Colonies in* America *injure* 'England — Our Northern Colonies injure *Eng-* 'land in ſo high a Degree in our Manufactures, as 'well as Corn-Trade, that, as ſays he, I hope all will 'unite in reforming ſuch Abuſes. To make this 'Point a little clearer, I ſhall mention ſome Facts: 'The Northern Colonies, at preſent, ſays a late 'Writer, produce much the ſame Commodities, as '*Great-Britain*; eſpecially *New England, New* '*York*, and *Penſilvania*; and they have ſet up ſeve- 'ral of our Manufactures (the 12,660 Cards ex- 'ported in twelve Months is no ſmall Specimen) 'ſuch as Woollen, Camlet, Linnen, Hats, Leather, 'wrought Iron, Bridles, Saddles, Harneſs, Beaver- 'Hats, Wheat, Cyder, Flour, Malt, Liquor, But- 'ter, Cheeſe, Soap, Candles, Chairs, Cabinet, and 'Turners Ware. They can have no Want of 'People, particularly as their Exports of all Kinds 'are now ſo great as to employ near 1000 Sail of 'Ships and Sloops to our Southern Plantations, and

the

' the *European* Markets. (See a Book called, *The*
' *Man of Commerce.*) — As the greateſt Value of
' thoſe Exports conſiſts in Corn and Grain, ſome
' ſhort-ſighted Reaſoners will ſay, we ſhall advance
' the *Dutch* Corn Intereſt as well as our own, and
' then we ſhall not be ſo fond of ſuch an Expe-
' dient. It will be better our Neighbours ſhould
' receive ſome Benefit, than that all the *Britiſh* Far-
' ming Intereſt fall into Ruin. — Let us no longer
' imitate the fooliſh Faſhions of the *French*, and
' neglect imitating them in Affairs of Commerce.
' They wiſely reſtrain their Plantations ſucking out
' the Heart's Blood of their Kingdom, by carrying
' on the ſame Buſineſs as is carried on in *France.* If
' we are not too wiſe, ſays this Author, at Page
' 54, to change old Opinions, and to imitate the
' Good of bad Men, let us follow the Example of
' *Cromwell*, in putting the higheſt Value poſſible
' upon the Corn-Trade. That Uſurper, who was
' ſubtle, deep, and circumſpect, who gave every
' Thing of Value due Attention; who took not
' Appearances for Realities, and who did not neg-
' lect great, political, good Points, for a few Incon-
' veniences attending them, knew there was not
' any Thing that could have benefited *England*
' more, than enlarging its Corn-Trade, though in
' Embryo. His ſtrong Attempts in treating with
' *Holland*, to expel them from Dealing in Corn,
' and his inſiſting on its being to be reckoned a
' contraband Commodity, if met on the Seas, as
' we are told by a moſt famous *Dutch* Author *De*
' *Wit*, in his Intereſt of *Holland*, ſhew us his Senti-
' ments in this Matter. Since he would have
' exerciſed ſuch a Power, if he could, over a Fo-
' reign State, let us, animated with the ſame Zeal
' for *England*, exerciſe the like Power over our
' Plantations, which are now much cleared (tho'
' not then) of Wood. If they had been then

' under

'under Tillage as much as now, we may eaſily imagine what would have become of them. I hope, ſays this Author, at Page 55, Gentlemen in Power, as they know their Duty to their Country, will not act like *Medea*, to know Good, and not do it; and, then proceeds thus with the Concluſion. — If the Landed Intereſt ſhould be in the like Diſtreſs as it was lately, it would, in all Probability in three or four Years afterwards, end in the Ruin of Trade and Navigation, as well as Huſbandry. Every fifty Farmers, of 200 Pounds Stock in Buſineſs, do neceſſarily ſupport and maintain 1100 Tradeſmen and Artificers, *viz.* Butchers, Bakers, Carpenters, Smiths, Braſiers, Iron-mongers, Rope-makers, Shoemakers, Grocers, Chandlers, Shop-keepers, Makers of Hats, Clothiers, Taylors, Pewterers, Coopers, Flax-dreſſers, Linnen and Woollen Weavers, *&c.* and ſeveral other Sorts which would be too tedious to enumerate. The frozen benumming Temperature of the Winter does not damp the Growth of Vegetables more, than the Poverty of Farmers doth the Intereſt and Spirits of Tradeſmen. The Tradeſmen, having loſt their beſt Cuſtomers, would be unable to carry on their Buſineſs, Freights would be few, Landholders would deſcend from bad to worſe, Rents would be generally ill paid, and, at laſt, unpaid; Lands would be unmanured, and other Advantages neglected (the common Caſe of Poverty) and thereby the Rents of the Kingdom, which may be kept up, if the Methods laid down are purſued, within five Years Time, reduced near three Millions *per Annum* leſs than at preſent. Every rational practical Farmer can tell you the Odds between manured and unmanured Lands, and the different Conſequences, and thereby ſhew that ſuch a Reduction is not imaginary only. The Reverſe of thoſe Methods, which chiefly raiſed the Value of

'Lands

'Lands from King *James* the First's Time, when 'we began to imitate the *Netherland* Husbandry; 'to the present, must, when they happen, abate the 'Value of them. What I mean is, that sowing 'Grass-Seeds, Inclosures, and manuring Lands, be-'ing neglected and disused in such a State of Mis-'fortune, must have such a Consequence. Those 'great Improvements in Husbandry were not com-'mon, particularly liming, sanding, and using Coal-'Ashes, not, I think, till *Charles* the Second's 'Reign, when the Effect was seen by giving a great 'many Years Purchase for the Freehold of Lands: 'Trade, flourishing, helped in a certain Proportion. 'Perhaps, the Tradesmen use and consume of the 'Product of Land, as Trade is at present, between 'three and four Millions of Pounds *per Annum*. 'And the Gentlemen, Clergy, Free-holders, and 'others not Tradesmen, use of our Corn Manufac-'tures 13,000,000 *l. per Annum*. I have tried these 'Estimates by some Rules in Political Arithmetic, 'which seem to justify the Truth of them; whoe-'ver dislikes them, may reject them.' At last, he ends his Book with the following Lines — 'I hope 'the Guardians of our Liberties and Properties (not 'imitating too many of our Countrymen, who judge 'of Matters they do not see or feel, not more than 'as Matters of Speculation and useless Refinement,) 'will, out of Affection to themselves and Country, 'do all in their Power to support the Landed Inte-'rest. There have been sometimes mighty Inqui-'ries about some National Interests; but they have 'frequently passed away too soon; however, the 'present Subject is of so much Importance to all 'Ranks of Men among us, that I hope it will meet 'with all the Attention due to it.'

Thus, Sir, I have made bold to intrude on your Patience by writing you a long Detail of this important Affair, and hope you will excuſe the Prolixity of my tranſcribing ſo long a Diſcourſe, ſince it is done with a true Intent of endeavouring my Country's Welfare, after an Author, who has ſhewed himſelf a true *Briton*, in his Writing for the ſame Purpoſe; and who, at Page 14, ſays, he finiſhed this Book *Anno Domini* 1734. Accordingly he would have all his Readers take Notice of the ſame, that they may calculate Matters mentioned in the Book, in Proportion to the ſaid Time. And as it is well known you are better acquainted with the practical Part of the New-Drill-Huſbandry, as well as the ancient *Virgilian*; and alſo more furniſhed with the Knowledge of all Books wrote on *Huſbandry* that were ever printed in this Kingdom, than Thouſands of others; I thought I could not addreſs myſelf to a more proper Perſon in *Great-Britain* than you, in Hopes of ſuch an Anſwer, as I very well know you to be capable of giving, for the Satisfaction of myſelf, and all my Readers, who am,

Honoured Sir,

Your moſt obliged Servant,

WILLIAM ELLIS.

Little-Gaddeſden, 30 December 1742.

CHAP.

CHAP. XIX.

Sir John - - - -'s, *Anſwer to the foregoing Letter.*

SIR, *January* 27, 1743.

'I Received yours of the Current, in which 'you have tranſcribed a Letter from an *Ameri-* 'can Correſpondent, and very juſtly obſerve, that, '(as Land bears a ſmall Value, and Labour being 'managed by Slaves much eaſier, and perhaps the 'Climate in ſome of theſe Colonies more favoura- 'ble for raiſing Corn than here) it will be of the ut- 'moſt Conſequence to *Britain* to diſcourage the 'Importation of Corn from thence to *Europe*; eſpe- 'cially conſidering that of late a great deal of waſte 'Ground hath been converted into Arable, and by 'the Inſtruction got from the Writings of ingenious 'Men, who have applied themſelves to the Study 'and Practice of *Huſbandry*, of which Number I 'eſteem you to be the moſt uſeful, the Science itſelf 'is much improved, and we are all taught how to 'raiſe larger Crops than could be obtained by the 'former Practice. I remember to have read in a 'Book wrote about the Encouraging the *Eaſt-India* 'Company in King *James* the Firſt of *Great-Bri-* 'tain's Reign, that the victualling of large Ships for 'that Voyage occaſioned a Scarcity of Corn; and 'the Books wrote in Defence of the Company ſay, that 'the large Ships were commonly victualled in *France*, 'and could not affect the Price of Corn in *Great-* 'Britain. The Books wrote on *Trade* alſo, in that 'Reign, ſay, that Encouragement ought to be gi- 'ven to the Importation of Corn, and all other 'Proviſions, and no Duty paid for ſuch Commodi-

'ties. Now it is found neceſſary to give a Premi-
'um on Exportation, and we can be in no Danger
'of wanting Corn in this Iſland at any Time, if
'Care be taken to keep a ſufficient Stock at Home
'for Caſualties: The only Difficulty is to find a
'Market Abroad, the rather that the *French* have
'lately made an Ordinance for the Encouragement
'of Tillage, whereby the *Taille* or Land-Tax,
'which is in that Country paid by the Labourers of
'the Ground, is fixed, aſcertained, and levied pro-
'portionably as in *Britain*, whereby the Land-La-
'bourers are not at the Mercy of the Tax-gathe-
'rers, who looked where they could eaſieſt come
'at it, and made all alike poor once in the Year, to
'the utter Diſcouragement of Induſtry. *Spain* alſo,
'who, from a long received Maxim of diſcharging
'all Exportation of Corn, altho' it be a Country
'capable of ſupplying both themſelves and their
'Neighbours, have ſo diſcouraged Tillage, that the
'Farmers there plow but very little of their Ground,
'becauſe in a plentiful Year Corn is ſo cheap,
'that it will not bear the Charge of Reaping,
'and they chuſe rather to turn their Cattle into the
'Corn-Fields, than be at the Charge of cutting
'down Corn. Yet now they begin to ſee their Er-
'ror, and to allow the Exportation of Grain, which
'will be a great Encouragement to Tillage, and a
'Loſs to thoſe who uſed to ſupply them. From all
'theſe Conſiderations, it appears highly reaſonable,
'that, in your Monthly Paper, you warn your Coun-
'try of the Danger of falling of Rents, which is in
'our own Power to prevent, before we be brought
'to the fatal Neceſſity of turning our Cattle into our
'Corn-Fields, or to learn from theſe *Americans* to
'plant Tobacco in the Place of Corn. Thus,
'according to your Deſire, I have given you my
'Thoughts upon the Subject of your Letter, which
'I hope you will accept of, altho' rude and con-
'fuſedly

'fuſedly put together. I ſhould be glad to have 'an Anſwer of my former Letter, and to know how 'your Cale, Rape, and Turneps thrive, and how 'ſoon they will be ready for your Sheep. I am to 'plant a good many Potatoes this Year; and, if 'they anſwer to half what an Author mentioned, 'that I ſaw lie on your Table, that is, two Buſhels a 'Pole, as they ſell at double the Price he writes of, 'I ſhall make more of them than of Corn. My 'Method of planting them I ſhall make known to 'you hereafter; If you can procure me a Buſhel of 'naked Barley, and ſend it to *London*, Mr. —— 'will pay you what Price you charge for it. In 'caſe you have a Mind to write to me before you 'go to *London*, you may; if not, Mr. — will give 'you a Frank or two, but I would rather pay any 'Poſtage, than not have the Pleaſure of hearing 'from you. Our Societies have not met for ſome 'Time, but I ſhall not forget what I promiſed.

I am, Sir,

Your moſt humble and obliged Servant.

To Mr. *William Ellis*, at *Little Gaddeſden* near *Hempſtead*, in *Hertfordſhire.*

Further Obſervations on the Importation of Corn into Europe *from* America. — I hope what I have before written, will prove ſufficient to inform all my Readers of the great Neceſſity there is for an Act of Parliament to prevent the fineſt of Wheat, *&c.* being brought into *Europe* from *America*, to the Prejudice of the *Britiſh* Farmers, who have certainly the moſt Right to ſupply Foreign Markets of all others: And what ought to urge the Neceſſity of having this cured, with the utmoſt Expedition, is, that this great Evil is yearly increaſing upon us, by the Multitude of Acres of Land that theſe *Indians* acquire by cutting down Wood, and the great Number of Convicts that are frequently tranſported from *England*

England to them; whereby they are enabled not only to carry on their great Engroſſment of Land, but alſo capacitated, by the Skill of the many Mechanics, thus furniſhed to them, to work as I have obſerved on our Manufactures, and ſend them into *Europe* to our infinite Prejudice; and, as theſe *American* Planters ſtill yearly increaſe their Quantities of Land and Riches, they will conſequently be enabled to give ſuch extraordinary Encouragements as will tempt many Voluntier Artificers, out of *Europe*, into their Service, till they become the greateſt Proficients; for the Neglect of Encouragement, at Home, has too frequently furniſhed foreign Countries with many of our beſt and ableſt Artiſts.

CHAP. XX.

Of the great Service a good Dog is of to a Farmer.

THE Neceſſity that all Country-gentlemen and Farmers are under of keeping a good Yard-dog. —The Farmer, above all others, is under the greateſt Neceſſity of keeping a right Yard-dog, becauſe he has an abſolute Occaſion for his Service, both at Home and Abroad. At Home, becauſe his Yard, Home-orchard, and Garden are all expoſed to the Rapine of Thieves; in his Yard he generally keeps his Poultry, his tame Rabbits, his Hogs, and Pigs, his Horſes and Cows in the Winter-time, his Implements for Huſbandry, and Fire-wood, moſt of which are liable to be ſtole all the Year, but more particularly in this Month, becauſe the Nights are at the longeſt, the Weather moſt ſeverely cold, and many idle, for Want of Work, or of Lazineſs; hence then many Temptations

tions generally take their Riſe, for prompting looſe Fellows to pillage and rob the Farmer, to ſupply their Wants, and, too often, their Extravagances, chiefly againſt the Holy-days of *Chriſtmas*, partly out of an ignorant falſe Notion, that ſuch Days are ſet a-part for Rioting and Luxury. But, let the Temptations be what they will, the Farmer (for there are no other in moſt Places) is the Butt of their wicked Deſigns; and, as few or no Farm-yards are ſo incloſed, but that ſuch Miſcreants can have Acceſs into them, one of the beſt Ways, to guard againſt their Attempts, is to be Maſter of a true Sort of bred Dog. It is alſo of great Conſequence to the Farmer's Intereſt, that he keeps a Dog, capable of defending his Fruits, which too many of the Populace think no Sin to rob him of, as being Things of little Value, when taken away in a ſmall Degree; but, when ſuch Pilferers ſucceed in their firſt Attempts, it often provokes them to hazard a Second, and ſo on till they become common Thieves, and ready to venture their Neck for a Penny Value.

How a Perſon was robbed of a great Number of Colly-flower Plants.—In the Year, I think, 1741, a Gardener, of *Cheſham* in *Buckinghamſhire*, was robbed of great Numbers of Colly-flower Plants, Cabbage Plants, and other Things, that were carried off, in the Night-time, by a Fellow, who, in great Haſte, ſold them off to Gentlemen, and others, about the Country, at an underline Price; but, before he had ſold off all his Parcels, he was taken and proſecuted. This was done for Intereſt, but the next Robbery was otherwiſe occaſioned:

How a Robbery was committed in a Garden out of Malice.—This Robbery was chiefly committed out of Envy and Revenge to a Gardener, who kept *Froome* Market in *Somerſetſhire*. The Matter was thus related to me: Two Fellows, who owed a

Grudge

Grudge to their Neighbour Gardener, were reſolved to vent their Malice by robbing him of Cabbages and other Garden-ware, which they did ſeveral Times to the Man's great Damage, inſomuch that the Gardener became ſo provoked, as to arm himſelf and his Son with two Guns, which he had charged with large Shot; when they had thus furniſhed themſelves with Arms, and had, ſome Time before, made public Declaration of the Danger that any Thief might expect to fall under, the Father and the Son watched their Garden, and, about one of the Clock, in the Night, on the 24th of *June*, 1732, they ſaw two Men enter the Garden, and fall to cutting of Cabbages; on which the Father cocked and levelled his Piece, but the Son cried, Do not ſhoot Father; however, the Father let fly, and ſhot one of the Fellows into the Small of his Back, which ſo diſabled him that he could not get off; the other ran away and left his Comrade ſo wounded, that the Urine iſſued from behind him, and he died the next Day, confeſſing, he did it out of Spite. Upon this, the Father was bound over to anſwer this Fact at the next Aſſizes, which was held at the City of *Wells*, and there acquitted. But ſo audacious were theſe Sort of Garden-thieves, at that Time of Day, that this did not prove a ſufficient Warning, as you will find by my next Account of a Robbery.

How another Garden-robbery was committed near the other Place, and preſently after it.— On the 4th of *July* following, while I was at *Froome*, a poor Woman, who carried on the Gardening-buſineſs, came crying into this Town, ſaying, ſhe had been robbed, the Night before, to the Value of three Pounds, by Rogues who ſpoiled her Cucumbers and Vines, and cut down the ſeedy Heads of Onions and other Plants that were ſaved for producing Crops of Seeds; and to ſuch a Paſs did many Villains

Villains arrive in theſe Parts, that, in a few Years after, they pulled down a fine built Houſe at *Melſham*, under Pretence, they had not Wages enough allowed them for their Work in the Clothing Buſineſs; but they were ſoon brought to Juſtice, three of them being hanged at *Saliſbury*, about the Year 1740, for this ſame Fact. But, as theſe Garden-robberies were committed in a Country, where, perhaps, the Gardeners could not afford to keep a Maſtiff always ready for their Gardens Defence, the Thieves, in ſuch a Caſe, have the greater Chance of coming off ſafer than thoſe, who may attempt the ſame in Gardens near *London*; for here they ſeldom fail of keeping a ſtout, fair-legged, Midnight-centinel, a true-bred Maſtiff-dog, who is the greateſt Terror to theſe Sort of Pilferers. But the next Account will farther ſhew the neceſſary Uſes of this excellent Dog.

An Account of a notorious great Robbery committed at Studham, *in* Hertfordſhire, *and of poiſoning a Dog to effect the ſame.*——This Pariſh joins *Little Gaddeſden*, in which ſtands a large lone Houſe, at a Diſtance from any other. Here, the Owner being a Gentleman of a conſiderable Eſtate, his Houſe was pitched on, by a Gang of Thieves, to be robbed; and, as a ſafe Introduction to the ſame, they laid a Plan of it before one of the Neighbours, who rented a little Farm of Ten Pounds a Year, within a Mile of the great Houſe. This Perſon, being a ſtupid ignorant Villain in that which concerned his chiefeſt Happineſs, but an artful ſly Rogue in that which was wicked, accepted their Propoſal, on Condition of coming in for Part of the Booty. Accordingly, having an Opportunity of receiving frequent Viſits from the Shepherd's Servant, to whom he was Uncle, he ſifted the Fellow from Time to Time, and got out of him,

when and what Money was brought into the Houſe, where laid, the Time when the Family might be eaſieſt ſurpriſed, and where the Houſe was weakeſt for their breaking in; and all this was ſo ſlily carried on, that the Servant perceived nothing of any Robbing-intent. When this was done, the next Thing was to poiſon a Maſtiff Dog, that a ſmall Farmer kept who lived within a Stone's-throw of the Houſe, leſt his Barking ſhould alarm the Family and betray them. This effected, the Thieves broke in as the People were at Supper, by the Maid's opening a Back-door; and when they had bound all, and plundered the Houſe (as it is ſaid) of ſeveral hundred Pounds *in Specie*, they went ſafely off. But the confined Perſons did not long lie ſo, for, as the Rogues left a Candle burning among them, one extended his Hand ſo far as to burn the String in two that bound another, and thus all were quickly releaſed; upon which they ran to the Church to ring a Bell that alarmed the Pariſh, and it was obſerved, that the firſt Man, who pretended to come to their Relief, was the very Villain who ſet the Robbery, feigning a great Deal of Condolence for their Loſs. In ſhort, the Thieves were never diſcovered till Years after, when ſome of them were hanged for other Robberies, and, at the Gallows, confeſſed the Particulars of this; therefore none was proſecuted on this Account. But a Curſe followed moſt of them, and he who was the Informer and Traitor, though he got ſome Money by this baſe Action, and took a fifty Pounds a Year Farm afterwards, at laſt was reduced to great Poverty, both in Pocket and Body, dying in a moſt miſerable Condition, leaving an only Son behind him, who came to the Gallows that his Father had deſerved before him. This Account ought to make Perſons ſuſpect impending Danger, when they find

find their Dog poiſoned, ſtolen, or otherwiſe deſtroyed, and alſo not to ſuffer any Servant to hold Correſpondence with any wicked Neighbour. But more of this when I write on *The Government of a Farmer's Family.*

Of the good and ill Properties of the Bear-dog.— This Dog is of the largeſt-ſized Breed of all others; I have ſeen ſome of them as big as a ſmall Aſs, and therefore only fit for Fighting in the Bear-garden, or to be kept looſe by Tanners, great Brewers, Butchers, or chained up in Gentlemen's Yards, Orchards or Gardens, by Way of Terror, for their Voice, as well as extraordinary Bigneſs, proves oftentimes ſuch a Scare-crow, as to keep off ſome, who would otherwiſe venture to rob a Yard, Orchard, or Garden; for the very Voice of this large Creature ſtrikes an Awe on the guilty Mind of Pilferers, leſt, by its potent Sound, it alarm the Family on approaching Danger, and cauſe a Watch or Purſuer. But there are two Inconveniences attending the keeping ſuch an auguſt Dog; one is, that he is rather of too heavy, dull, and ſleepy a Nature, to act the moſt vigilant Quadrupede Watcher, and therefore requires a ſmall Cur-dog to keep him Company, who, by his more ready Hearing, and quick Proneneſs of Barking, will give him Notice of impending Danger, go before him *Jackall* like, and ſhew him his Enemy or Prey. The other is, the great Quantity of Horſe or other Fleſh, that ſuch a large Dog requires, to keep him in Heart, and prevent ſo keen a Hunger as would provoke him to fall on a Man or Beaſt that he ought not to meddle with. I once had a ſmall Bear-dog ſent me from *London* by a Friend, who intended me a great Pleaſure by the Act, but it did not prove ſo in the End; for, in leſs than a Month's Time after I had him, whether for Want

of a Bellyfull of Meat, or being tempted by a voracious Propenſity of Nature, he killed three of my next Neighbour's Sheep in one Night, which, to ſatisfy the Farmer for, I gave him Leave to pick out three of the beſt Wethers in my Flock, and hanged my Dog into the Bargain; contrary to the common reigning Notion amongſt Farmers at this Time of Day, who generally imagine they have made ſufficient Recompence or Reſtitution, when they have hanged the Dog that has killed his Neighbour's Sheep or Lambs. And here I cannot but ſtop my Pen, to make an Obſervation on the Humanity and Generoſity of a moſt noble Perſon, whoſe Seat ſtands near the Edge of *Suffolk*, although it is a little foreign to my preſent Subject.

Of the Humanity and Generoſity of a moſt noble Perſon.—It is well known by innumerable Inſtances, that the Perſon, I am here writing of, has ſignaliſed himſelf by Acts of Generoſity, to a ſurpriſing Degree, even from his Youth. One of which in particular was extended to me in my juvenile Years. But, to come nearer to my Purpoſe, this Nobleman being a great Lover of Fox-hunting, in a fine open ſandy Country, encourages the Breed and Preſervation of them, even in his Neighbourhood. Now, when I travelled in thoſe Parts, a few Years ago, it did not a little move my Wonder to hear, in the Country about him, of the great Miſchief the Foxes occaſioned the Farmers, by cauſing them to be at extraordinary Charge of keeping a Watch almoſt all the Lambing-Seaſon, to protect their Lambs from the greedy Jaws of the deſtructive, bold, and ſubtle Fox, who is ſo prone to prey on theſe harmleſs young Creatures, that, notwithſtanding two Men watched with their Guns, in a Moonſhiny Night, yet a hungry Fox killed two, and wounded

wounded four Lambs, that were incloſed in a Fold, before the Men could reach the Place, though they (as one of them told me) run pretty faſt. For all this there were none, that I heard of, complained of this Nobleman, but ſeemed glad to live near ſo good a Perſon, becauſe he amply made them Amends, whenever they made appear any Damage they had ſuſtained from any Fox, or otherwiſe, by his Means, beſides giving them Reaſon, at other Times of the Year, to rejoice they had ſo liberal and great a Perſon in their Country for their Benefactor.

Of the good and ill Properties of the Bull-dog.—There are ſeveral Sizes of this Dog, and alſo ſeveral Colours, of which the Brindle is generally accounted the beſt, yet he is but a ſmall Dog in Compariſon of the Bear-breed. The *Engliſh* Bull-dog is well known to exceed all Dogs in the Univerſe for Courage, becauſe he will endeavour to the utmoſt of his Power to run at a Bull, even after Part of his Legs are cut off, on his Stumps; for no Wound or Terror can affright him from attacking a Bull, as long as he is capable of it, and ſo in fighting with any Dog, Badger, Fox, or any other Creature, from the greateſt to the ſmalleſt Size. He fears no Man, though armed with the moſt terrible Weapon. I have ſeen a Bull-dog ſo taught, that a Man muſt be very dextrous to keep him off gaining his Hand, if he once could get the Stick or Sword into his Mouth, for he would ſtrive to gather more and more Hold, till he could ſeize on the Hand. Another I have ſeen, that was taught to graſp the Inſtep of a Man, in Order to ſtop his ſtirring any farther, and this at the Word of Command, when his Maſter ſaid,—*Take Hold of his Buckle.*—But, notwithſtanding all this, he is one of the moſt difficult Sort that is, to be taught any other

other Tricks than what relate to Seizure, which I take to be owing to the Inflexibility of his moſt ſurly Nature, when vexed, and high Courage not to ſubmit to any Beating. Indeed I have ſeen them brought to fetch and carry at a Word, but then he was taught ſo to do by fair not by foul Means, for this magnanimous Creature may be led, but not driven or forced. The Bull-dog is not fit to be kept in Common in any Gentleman or Farmer's Yard, becauſe he is too ready to lay Hold on any tame Bull, Ox, Cow, or Calf; and, when he faſtens on either Man or Beaſt, it is a moſt difficult Matter to make him let go, he is ſo hard bitten. This Quality in them cauſes moſt Bull-dogs to loſe Part of or all their Fore-teeth in a little Time after they have been uſed to engage Game-bulls, eſpecially their upper ones, which always, in a true-bred Bull-dog, ſtand more in than the lower Teeth. I have known a well ſized ſtrong Bull-dog kept on Purpoſe, to ſeize on a Stag when he ſtood at Bay in a Park, which he ſeldom ever failed to do, and held him till the Keeper cut his Throat, notwithſtanding all the Oppoſition his long and many ſharp Antlers could make, with which ſome Stags have killed ſeveral Hounds, before they have been overcome. The Bull-dog is a moſt faithful Servant and pretty ſure Safeguard to his Maſter's Perſon, for it is a moſt dangerous Attempt for any Stranger to attack him in the Sight of ſuch a Dog, who in this Caſe is naturally inclined to jump at the Throat of that Man who offers Violence to his greateſt Benefactor. Yet this Breed is ſomewhat dangerous in the Country, even when it is between him and a Mongrel, as was proved by two Dogs kept by a Butcher near *Ivinghoe*, who, being in Queſt of a Badger, fell in the Night-Time on two

Bul-

Bullocks, and tore them to Death, ſo that their Maſter was forced to pay for them.

Of the good and ill Properties of the Maſtiff-dog.—I am now come to the laſt Character I intend here to give a Dog, and that is of the Maſtiff, which is the Sort I deſigned this Chapter purpoſely to treat of, as being the moſt uſeful domeſtic Dog of all others; and, although I have before wrote on the Bear and Bull-dog, it was to ſerve only as an Introduction to what I am going to write on this moſt ſerviceable Creature; a Creature that no Gentleman or Farmer ought to be without, who has an Opportunity and Occaſion to keep him, for the Sake of the many Advantages attending a true bred and broke Maſtiff-dog. But, before I mention them, I ſhall obſerve, that what may be called a *Maſtiff*, is a Dog that may be bred between the Bull, the Bear, and other Dogs. The Bull being of a ſmall Size, and the Bear of the largeſt, the Breed will be of a right Bigneſs, and endowed with ſuch Qualities, as will render it, with good Management in their Whelp-age, a right Dog for the Uſe of Gentlemen, Farmers, Tanners, Butchers, Brewers, and others who are Owners of large Yards, *&c.* If there is any Fault in ſuch a Breed, it may be too large for ſome, or too ſharp bitten for others. If a Whelp has the greateſt Share of the Bull in it (which may be partly known by its chub or round-iſh Head) they too often faſten and hold ſo hard, that it is a difficult Matter to make them let go, and therefore are ſubject to ſpoil a Cow, or other Beaſt, before they can be diſengaged. On this Account, if any Perſon is apprehenſive of either or both theſe Faults in a Dog, it is only having a ſecond Breed from him, with either a Water-ſpaniel, Grey-hound, Lurcher, or ſuch like. I have known a Breed very much coveted between a Bull-dog and a large

a large Water-ſpaniel, becauſe the Latter is commonly Maſter of an excellent Scent, which, on his Hunt, he takes from the Air, and upon the Water, that capacitates him to recover Water-fowls that are ſhot and wounded, and would be otherwiſe loſt. And, as ſuch a Spaniel has generally a rough Coat and a hardy Conſtitution, he fears no Weather in his Search after his Game; I ſay, therefore, a Breed from ſuch a Spaniel will give the Bull-part a Noſe that may be very ſerviceable to a Dog that may have Occaſion to hunt and ſeize a Fox, Badger, Otter, Hedge-hog, Pole-cat, Martern, Wild-cat, and other Vermin, that too often infeſt Grounds near Home, and do great Miſchief, which may be prevented by keeping ſuch a Maſtiff or Yard-dog, who may ſecure your Poultry, tame Rabbits, Wood, Fruit, and Implements of Huſbandry, that lie in and about your Houſe, Orchard, Garden or Home-cloſe; and, if a Thief, Fox, or Badger, ſhould chance to carry off their Prey, it may poſſibly happen, that ſuch a Dog may follow them on a freſh Scent, and ſhew you the Robber's Houſe, or to the Hole of the Vermin. Such Dogs, if they are of a true Size, and rightly bred, will have Courage, Strength, and Sharpneſs of Teeth enough to encounter any wild Beaſt, and are commonly cunning enough to take the greateſt Advantage in their biting the moſt tender and ſinewy Part of their Enemy, which often gives them the Opportunity of coming off Victors. Others are for having a Maſtiff or Yard-dog bred between the Bull-dog and the Grey-hound, that they may enjoy a light courageous Cur, capable of taking up a Hare or Coney, if either of them ſhould lie ſo in his Way, that they cannot get from him; or, in Caſe he has the Opportunity of purſuing a Fox, Badger, Pole-cat, Martern, wild Cat, and ſuch like,

he

but the Maſtiff is likewiſe ſerviceable on ſeveral other Accounts too tedious to name here; however, I ſhall mention one, for its being very particular, and that is, as I am informed, the great Town of St. *Malo*, a Sea-port Town in *France*, is ſaid to be kept by Maſtiff-dogs, proceeding at firſt from a Bull-race, ſent over thither from *England*, many Years ago, but ſince degenerated into a Sort of Maſtiffs; theſe, in the Day-Time, lie under Butchers Stalls and other ſhady Places, till at ſuch an Hour in the Evening, when a Man with a Horn calls them to him, to which, by Cuſtom, they readily anſwer, by aſſembling themſelves into a Pack and follow him. When they are all got out of the Gates of the Town, they are ſhut out for all Night to watch and guard it; and they ſo diligently incompaſs the Walls of this Iſland-town, that they ſeldom fail of tearing a Man to Pieces, who, by Ignorance, Wilfulneſs, or Accident, comes in their Way. Another Account of Maſtiffs, that I cannot well paſs over, is: I have obſerved very great Dogs, kept by Cow-keepers in *Middleſex*, for guarding their Yards, and attending the Cow-herd in his driving Cows to and from the Field. Now, theſe large Dogs were not kept altogether for this Uſe; no, the Owner made a Sort of Merchandiſe of them, for they paid him as well, or better, than the beſt breeding Sow has done ſome others; and this by taking great Care to have a Breed from the largeſt Bear-dog and any other of a good Size. I remember a Dog, kept by one of theſe Cow-keepers, that appeared to me to be the higheſt and fineſt-ſhaped I ever ſaw, having a rough, long, hairy, fallow-coloured Hide, with a long turned Tail, which gave me to underſtand he was bred between one of the largeſt Bear-dogs and biggeſt Grey-hound, or Lurcher. When theſe

arrived to a proper Age and Bigneſs, the next Thing was to get a good Market for them; and the beſt, that he commonly met with, was to ſell them to *Frenchmen*, who every Year come into *England* for the ſame Purpoſe; and, as the Cow-keeper, I am mentioning, generally kept two of theſe at a Time, he got a conſiderable deal of Money by them, beſides the enjoying the Benefit of their being his Yard and Cattle's Guardians. But ſome may wiſh for a Maſtiff-dog that is not ſo dangerouſly furious, as the common Sort are. On this Account I muſt recommend to them the gelt Maſtiff:

The good and ill Properties of the gelt Maſtiff-dog. A Maſtiff-dog may be ſo far improved by gelding him when he is young, as to abate his natural Propenſity to Fury, and thereby bring him under ſuch a Temper, as to put his Maſter out of Danger of paying for Cures, or the Death of Sheep, or other Creatures; for a furious Temper is certainly inherent to moſt of the Maſtiff-breed, who, if their fiery Nature is not broke by good Diſcipline in their Whelp-age, as I have before obſerved, it is ten to one, but they become too miſchievous when older. Hence proceeds the Invention of Gelding, for reducing their ſavage Quality, which it will do with great Aſſurance. Our late Miniſter kept a gelt Dog ſeveral Years till he died in *November*, 1742. This Dog was a Maſtiff, of a Fallow-colour, a midling Stature, ſtrong built, had a Head between the Bull and the Bear-dog, with a long Tail that turned up towards the End, and was thought to be one of the handſomeſt Dogs in our Country; and, for making him as uſeful as he was handſome, he was kept chained up, all the Day, near the Gates of the Dwelling-houſe, but every Night let looſe and confined to the Compaſs of an incloſed Yard. Now,

by

by thus chaining this Dog up in the Day-time, it checked his eager Advances towards any ſtrange Dog, that might caſually come near or to the Houſe, and prevented him going beyond his Chain to any Victuals that might be ſhewn him, on Purpoſe to provoke his eager Deſires after it, and learn him to become curſe and ſharp; for, by ſuch Confinement, the Dog is incenſed, and that dull heavy Temper, that he may be either naturally poſſeſſed of, or acquire by Gelding, was hereby altered, ſo that this ſame Dog, who by Gelding, for a good While, became ſo fearful, that he dared not to fight a leſſer one, nor ſtand againſt a heaved up Stick, afterwards grew ſo bold and courageous, that he would fall on any who attempted to be rude with the Maid or Boy-ſervant, or would pretend to ſtrike him with a Stick, or Whip, to prevent it. In ſhort, this gelt Maſtiff, who, to my Knowledge, came off ſuch a furious Bitch, that ſhe was the Terror of the Neighbourhood, became of ſo right a Temper, that he anſwered the End of his Gelding and Keeping to Admiration. I would have bought this Dog for a Gentleman my good Friend, but Madam, the Parſon's Wife, would not conſent to it on any Terms, becauſe, in the Day-Time, the Sight of this large Dog diſcouraged Vagrants coming too near the Houſe, and, in the Night-Time, his audible Voice, which uſed to ring throughout the Neighbourhood, forbad any Attempt from Thieves coming to, and breaking into the Houſe or adjoining Barns. But I cannot quit this Subject before I mention two other good Properties belonging to a gelt Dog; one is, that ſuch a Dog will keep himſelf in good Caſe with leſs Meat than an ungelt Dog can, which is a deſirable Conveniency, where a Gentleman, or Farmer, keeps a ſmall Table; or, where a rich Miſer keeps ſuch a one,

that, according to the old proverbial Phraſe,—— *The Dog may be ſaid to run away with whole Shoulders.*—— But neither of theſe was the Parſon's Caſe, for, to do Juſtice to his Memory in this Reſpect, the Neighbourhood knew there was ſuch a Man lived amongſt them, by the plentiful Entertainment he gave his Friends, and the Hoſpitality he uſually extended towards the indigent Inhabitants near him, ſo that his Maſtiff-Dog never wanted an offal Subſiſtence. The other good Property, belonging to a gelt Maſtiff-dog, is, that, by ſuch Caſtration, he is out of the Power of being ſeduced into Silence, by the common Impoſition of a ſalt Bitch, which is a Bite that has ſubſiſted Time out of Mind, and is too often practiſed by Thieves at this Day, who intend to break open an Houſe in the Night-Time, or rob an Orchard or Garden, *&c.* I ſhould have writ on other good Qualities belonging to the Maſtiff-dog, but I have only Room to obſerve, that, as ſuch a Dog is commonly of a large Size and ſtrong Body, he may, in his early Age, be ſo taught, as to become a very uſeful Domeſtic Porter to his Maſter, by fetching and carrying Things of ſome Weight, even to the Eaſe and Relief of the Perſon he follows. I once brought up a Curr-dog to be ſo ſerviceable, as to accompany my Wife, and carry a Baſket of Eggs after her, which he would very carefully do, by taking the Handles of the Baſket into his Mouth, and, when he had a Mind to reſt, he would let the Baſket ſtand on its Bottom on the Ground, but the Handles he would not part with; and ſo many other Things. But, were I to mention the ſeveral diverting Actions that this docile Creature would perform at the Word of Command, beſides ſerviceable ones, they would exceed half a Score. I ſhall only add an Account of a particular Accident

that

that befell this Dog: As he was bred a meer Mongrel, or Curr, he had ſo ſmall a Share of a ſcenting Noſe, that he was once loſt for ſeveral Months; and when, by Information, I heard where he was, I went and demanded my Dog; the People I found very willing to part with him, for they were ſo poor as hardly able to keep a Cat well, telling me, they would have hanged him out of their Way, but that he pleaſed them with ſitting up in a begging Poſture every Time they were at Victuals, which ſo diverted them, that they ſpared his Life; in ſhort, the Dog had been kept ſo poor, that he was hardly able to follow me Home, tho' it was leſs than ten Miles from my Habitation. If I was to proceed farther in giving a full Detail of the many Services this uſeful Animal is capable of diſcharging, I might (beſides mentioning what I have before ſaid, and that of their drawing a conſiderable Weight, which I have ſeen one and more Dogs do in Harneſs, particularly the four-wheel Chair, with a Perſon ſitting in it, by four or ſix of theſe Maſtiff-dogs, to the pleaſing Sight of their Beholders) write a Folio Volume of their Worth and Actions. But, to ſay a great deal of this excellent Creature in a little Compaſs of Paper, I ſhall inſert the following Lines in his Praiſe, *viz.*

On the *Dog*, tranſlated from the *Latin*.

THE Dog among the Quadrupedes,
For Sport and Faithfulneſs, exceeds
All other Beaſts. He beſt attends
His Maſter's Call; his Houſe defends,
And, tho' he's driven away with Spurns,
With wagging Tail he ſtill returns.

When

When you his Excellence diſplay,
He's ſenſible of what you ſay,
And, in dumb Shew, his Thanks does pay.
He ſwims where'er you take the Ford,
Whene'er you ſail he goes on Board;
With you o'er rugged Alps *he goes,*
And guards you through a Croud of Foes.
Still, all the Day, he keeps in View,
Nor is he in the Dark leſs true,
He loves not him that loves not you.
Through all the Windings of the Wood,
He toils to make your Paſtime good;
Runs down for you the nimble Hare,
And it, untore, in's Mouth does bear;
Purſues all Game through Buſh and Brake,
Not for himſelf, but for your Sake.
When you repoſe, he couches by,
Or bears his Chain contentedly.
Your Houſe's and your Poultry's Guard;
Drives Thieves and Foxes from your Yard;
In Sleep ſecure your Houſhold ſnore,
He drives all Treach'ry from your Door.
He aſks no dainty Bit, or Cup,
Profuſe, to keep his Spirits up.
Content your dirty Plate to lick,
A Cruſt to gnaw, or Bone to pick.
Who would not ſuch cheap Servants pleaſe,
Who would not love and harbour theſe?

CHAP.

CHAP. XXI.

COPIES of LETTERS.

The Copy of a Letter to this Author, ſhewing how happy a Gentleman has been in diſcovering Peat-Earth *in his Eſtate, ſince the Way of doing it was firſt publiſhed in his Monthly Book for* July.

SIR,

'YOUR public Spirit, in communicating your Knowledge in Huſbandry to the World, and generous Declaration of being ready to give Gentlemen any farther Satisfaction, by Letter, in Points wherein they may want to be informed, has encouraged me to give you this preſent Trouble.

'The Time drawing near for ſowing Barley, I am deſirous of making Uſe of the Receipt you have publiſhed for ſteeping it; but want to be informed, whether you mean by Chryſtal Nitre, common Salt-Petre, or the Preparation of it called *Nitrum Purificatum*, and why Salt-Petre will not do as well, as this Preparation of it: If this be meant, you will alſo oblige me in being partilar in informing me what Quantities of each of the Ingredients you add to the ſteeped Liquor, when it wants renewing for the ſteeping of more Barley; and, as you ſay you have diſcovered, ſince the Publication of this Receipt, another Ingredient to ſupply the Place of the Nitre, which is much cheaper, and will anſwer the End as well, I ſhall acknowledge the Favour, if you will be pleaſed to communicate that alſo to me.

'Since

'Since the Publication of your Books, I have 'found in this Pariſh where I live a Peat-Earth, 'which I burnt laſt Summer, the Aſhes of which 'anſwered intirely to the Deſcription you have gi- 'ven of ſuch Aſhes. I have ſown them in the Quan- 'tity you direct, *viz.* Somewhat under two Quar- 'ters of our Meaſure to the Acre, upon Land new 'laid down laſt Spring with Clover, upon Wheat- 'land and *St. Foine:* I have alſo reſerved ſome to 'ſow upon Barley-land. Our Farmers, who are not 'uſed to the powdered Sort of Manures, think that 'ſo ſmall a Quantity of Aſhes upon an Acre of 'Land cannot poſſibly do Service; I ſhall be glad 'to be informed, whether you have ever made Uſe 'of this Manure yourſelf upon your own Land; 'or whether you have known any of your Neigh- 'bours make Uſe of the *Langley* Aſhes, which 'Place I gueſs to be not far diſtant from you, 'and with what Succeſs.

'I am thinking with myſelf, whether I cannot 'make this Beginning of my Acquaintance with 'you in ſome Reſpects ſerviceable to yourſelf, by 'being your Chapman for ſome Sorts of Seeds, 'which you may poſſibly want to ſell, and I to 'buy. I ſhall have Occaſion this Spring for ſome 'Hundred Weight of Clover-Seed, and milled Tre- 'foil; if you have any Quantity of theſe Seeds to 'ſell, and can deliver them at *New Luton* in *Bed- 'fordſhire*, I ſhall be glad to know your Prices, and 'to deal with you for what I want. The *Kettering* 'Carrier goes through *Luton*, and paſſes by my 'Door, ſo that he can bring any thing of this Kind 'from thence, if it is delivered to him at *Luton*. If 'you pleaſe to favour me with an Anſwer to this 'Letter, direct to me, *&c.*

The AUTHOR's ANSWER *to the foregoing Letter.*

SIR,

'IT is with great Pleaſure that I anſwer ſuch a Gentleman's Letter as yours, becauſe you have diſcovered yourſelf to be a true Lover of Improvements in Huſbandry. If more were of your Mind, they would more than they do depend on the rational Account of a Practical Author, and make large Efforts to better their Landed Eſtates. On the Contrary, it very much chagreens me to ſee my Countrymen dilatory in ſuch excellent Matters, while Gentlemen both in *Ireland* and *Scotland* are now in full Career with Endeavours to enrich their reſpective Countries, ſtriving to vie with or out-do *England* in the greateſt and moſt beneficial Branches of Grain, Graſſes, Beaſts, and other Matters of Huſbandry. It was for this Purpoſe, that three Gentlemen, about *Michaelmas* 1742 laſt, came from *Scotland*, to deſire my Correſpondence, where they have now eſtabliſhed two Societies, one at *Edinburgh*, the other at *Ormiſtone*, for finding out Ways and Means to improve their Country in the beſt Manner poſſible.

'As to the Steeping of Barley-Seed, it is to be done with the Chryſtal Salt-Petre, which I call the *common Salt-Petre*, ſuch as they uſe in Salting Bacon, and Pickling of Pork. When the firſt Liquor is drawn off, add more Mudgel-Hole Water, and two Pounds of Salt-Petre, and ſo on at every Renewal. And as to the cheap Ingredient that will ſupply the Salt-Petre, I intend to give you an Account of it, when I ſend you the Clover and Trefoil Seeds, notwithſtanding I have never yet publiſhed it, as I remember, in any

'Book; and, if you will follow such a cheap Re-
'ceipt, you need not fear Out-doing your Neigh-
'bours.

'I rejoice to hear of your Success in the Discove-
'ry of Peat, and in the Use of its Ashes: I buy
'mine at *Langley*, and sow them on natural and
'artificial Grasses, Wheat, Pease, *&c.* but they are
'found to answer best on Pease and Clover; not
'but that they will certainly (if a kind Year hap-
'pens) do Service to all Sorts of Corn and Grasses,
'and in Gardens, *&c.* But of Peat I have a consi-
'derable Account more to publish on the Burning
'of it, and hope I shall be the Occasion of many
'more Discoveries of this excellent Manure, and
'other most valuable Matters in *Agriculture*, if Gen-
'tlemen would be as hearty in encouraging them,
'as they are in a thousand Times less valuable
'Things. The Price of Clover-seed is four Pence
'Half-penny a Pound, or two and forty Shillings a
'Hundred Weight. Our Trefoil in Hull is three
'Shillings *per* Bushel, for we never sow it milled in
'*Hertfordshire*; because we find it much the secu-
'rer Way against Worms, Frosts, and Chills of
'Waters. I shall always be glad of any Opportu-
'nity of giving you what Satisfaction lies in my
'Power, as being,

Sir, your obedient humble Servant,

WILLIAM ELLIS.

Little Gaddesden, 30 De-
cember 1742.

Obser-

Observations on this Gentleman's Finding Peat-Earth *in his Estate.* — This *Northamptonshire* Gentleman, whom I never saw, as being altogether a total Stranger to me, directly on reading my Treatise of *Peat-Earth*, reposed a Confidence in the same, and preferably to any phantastical Whim, or vain Fancies, which generally produce only Loss of Time, Money, and Labour, searched after the better Part, even that which, perhaps, may be never lost, or taken away from his Family; and, having found a rich Mine in his Estate under and (if I may so term it) above Ground at a very small Expence and Pains, is thereby capacitated not only to furnish himself with one of the best and cheapest Manures in the Kingdom, but also to supply his neighbouring Farmers with the same to their great Conveniency and Profit. I say, to their Conveniency; for, as they were Strangers before to the Efficacy and Power of a Powder-Dressing, it is very likely there was no such Thing to be had in their Parts at a tolerable Price; therefore it must consequently redound to their very great Profit, to enjoy so fertile a Manure so near them at a most cheap Rate. For which Discovery of mine, and for sending him a Receipt how to improve Barley-crops to a great Advantage for a trifle Charge, even for four Pence an Acre Expence, besides Plowing, Seed, and Manure, this honest Gentleman was so grateful, as to send me a Present in *February* 1742-3, by the *Kettering* Carrier, and paid Carriage for the same to my House. Hence I would observe, that if our *British* Gentlemen would employ more of their Time in the Study and Improvement of their Estates, as the Gentleman has done I am writing of, and less in those Things, which on the Contrary too often bring a Ruination on them; we might by these Means, with the Help of the fertile Nature and happy Situation of our Climate, undoubtedly, become one of, if

not the moſt flouriſhing Nation in the World, provided a ſpeedy Stop be put to the Importation of Corn, *&c.* into *Europe* from our Plantations in *America.* And as I am the firſt Author that has ſo particularly deſcribed the Parts where Peat-Earth is to be found, ſo that it may be diſcovered in a thouſand Places where the Owners never before entertained a ſingle Thought of the ſame, I hope I ſhall have the Pleaſure, in a little Time, to hear of more Acquiſitions of this Kind; and, that I may be compleatly inſtrumental in doing ſuch infinite Service to my Country, I am ready to inform any Gentleman how to burn and uſe the Peat and its Aſhes by Letter, provided they pay Poſtage, or frank theirs to my Houſe thirty Miles diſtant from *London*, otherwiſe they muſt not expect an Anſwer. And here I could proceed a great deal further in obſerving how gainful the Uſe of theſe Peat-Aſhes may be made, in forcing on the Growth of Timber-Trees, Hedges, and a thouſand other Vegetables, but the Dimenſions of my Paper will not permit it here.

CHAP. XXII.

Of Charity, *and the Acts of ſome* Charitable *Perſons.*

OF Charity, *and the great Importance of extending it to proper Objects in this Month.* — The ſhorteſt Days, the longeſt Nights, and generally the coldeſt Weather accompany this Month; and therefore it becomes the moſt expenſive and moſt neceſſitous Seaſon in the whole Year to Thouſands of the poorer Sort of People and their Families, who are hereby incapacitated to get their daily Bread by their uſual Labour and Induſtry; which renders them

them the greateſt Objects for thoſe to relieve, who are of Ability to employ their Charity in the moſt exalted and beneficial Manner poſſible.

The firſt Example of a Charitable Gentleman, — That I begin with, is as it was publiſhed in the *Northampton Mercury*, or *Weekly News-Paper*, dated the 28th of *February* 1742-3, thus: On *Friday* Night laſt died of a Conſumption, at his Seat near *Ormſkirk* in *Lancaſhire*, *Walter Lloyd*, Eſq; a Gentleman poſſeſſed of an Eſtate of 1500*l.* a Year, which he employed not in the modern extravagant Diverſions of Maſquerades and Operas, but conſtantly in Acts of Hoſpitality and Charity; which makes his Memory dear, and his Loſs irreparable to all that knew him.

A ſecond Example. — The hard Froſt that began about *Chriſtmas* 1739, and ended the 23*d* of *February* following, was deemed the ſharpeſt in the Memory of Man; for it occaſioned the Death of many poor People who wanted Heat and Victuals; notwithſtanding it was obſerved, that there were never greater Acts of Charity diſplayed than in this Seaſon. One of the Public Papers has it thus: There being at this Time more poor Families in Diſtreſs than was ever yet known, we hear ſeveral People of Faſhion have ordered a Diſh leſs at their Table every Day, and the Value of it to be diſtributed to poor Objects, who through the Badneſs of Trade, and the Dearneſs of all Sorts of Proviſions, are reduced to great Want. Happy is the Man, whoſe Heart and Abilities are equally diſpoſed to to ſuccour and relieve Perſons labouring under grievous Afflictions, a Pleaſure the greateſt which Human Nature is capable of taſting; and it is thought there never was more Reaſon to diſplay their exalted Virtue than at this Time, when the Poor died to the Number of many Thouſands by their Potatoes

toes being ſpoiled by this Froſt; and, in *Cheſhire* as well as in many other Parts, the pooreſt Sort diligently waited on the Farmers Brewings, to beg their Grains, to eat and ſubſiſt on.

A third Example — Is by the Death of *Thomas Saunders* of *Brill*, in *Bucks*, Eſq; : He formerly was in Commiſſion of the Peace for this County; he was an Officer under Captain *Balchen*, during Queen *Anne*'s Wars, and was twice taken by Monſieur *Du Guet*; and, how well the Captain and his Officers behaved in both Engagements, is well known by what Monſieur *Du Guet* ſaid, *That it was the D—l, or* Balchen *fought a ſecond Time*. His Love for his Country appeared in his Retirement, as well as in his moſt active Parts of Life. His Intereſt was his Country's. His Houſe was open to all that loved old *England*. He was the ſincereſt and warmeſt Friend, the moſt affectionate Huſband, and the moſt tender and indulgent Parent. He died as he lived with true Chriſtian Courage; and, at the Moment of his Expiration, deſired the Clergyman who attended him, to read the recommendatory Prayer. And happy would it be for *Britain*, had every Officer ſo much Courage and real Love for his Country, and had every Man of Courage and true Patriotiſm ſo much Religion. He died in *December* 1741.

A fourth Example — Is taken from a News-Paper, dated the 11*th* of *January* 1741. We hear from *Saffron-Walden* in *Eſſex*, that the Earl of *Suffolk* has this *Chriſtmas* given away to the Poor of the Six neareſt Pariſhes to where he lives ſix very good Steers, and ſix Hundred Threepenny Loaves, which Gift his Lordſhip has contributed Annually ever ſince his Marriage.

A fifth Example, — As mentioned in the *Evening Poſt* the 14*th* of *February* 1737, is this: The Relict of Sir *Ed. Stradling*, in *Glamorganſhire*, maintained the ancient *Britiſh* Hoſpitality; daily ordered

dered the Remains of a plentiful Table to the Poor. She loved her Country ſo, that no Diverſion could get her to Town out of *Wales*. She loved the Church ſo, that ſhe would never make an Excuſe for Staying from it. In ſhort, ſhe had no other Views on Earth, but what looked towards Heaven.

A ſixth Example ——Is a very particular one, as it was related to me by a poor Man, who ſaid, that the Rich Man of *Glouceſtershire* is ſo charitable a Perſon, as to give, as uſual, a Shilling to each Woolcomber and Weaver at *Cirenceſter* every *Chriſtmas*, he at one Gate, and his Lady at the other. He gave it out of his Hat; and, when his Money was gone, he deſired his Lady to ſtop, till he fetched more from his Coffer: At his Return, ſhe aſked him, How the Money held out? He anſwered, He thought there was never the leſs for what he had given.

A ſeventh Example —— of a Pinmaker in *London*, who, to my certain Knowledge, allowed a poor Man five Pounds a Year for ſeveral Years together, meerly out of Charity, as having formerly been a ſubſtantial Houſe-keeper.

An eighth Example —— Is of that moſt Noble Lady, who is ſuch an Ornament of Humility, as to give the poor People of *New-Market* in *Suffolk* free Acceſs to her Perſon, in order to make known their neceſſitous Grievances, and as readily contributes to their Relief, by Alms of Cloaths, Medicines, or Money. But to come nearer Home:

A ninth Example. — Our *Gaddeſden* Poor were this *Chriſtmas* 1742, as well as at other Times, very ſenſible of a ready Money and Bread Charity, extended to them by a moſt Noble Family; as alſo of two others from the ſame. One by a Weekly Dole of offal Victuals, and the other by the Liberty given the Poor to gather the broken Wood that Age and Storms of Wind cauſe to fall from thoſe

thoſe large Beechen Trees that now ſtand in one of the beſt wooded Parks in the Kingdom.

A tenth Example of Charity — Is alſo well known to me, as done by two Widow Gentlewomen, Mother and Daughter, living at that Time, *December* 1742, in *Weſtminſter*; who by repeated Acts of Charity, and only for the Sake of Charity, have given two, three, four, and five Guineas away at a Time in a moſt excellent Manner: As when a Servant-Maid marries from them, towards furniſhing a Room for them: To a young Man at his being out of his Apprenticeſhip, for buying him Tools to work for himſelf: To another who was formerly a Servant to them, but through Age wants Relief, and ſo to others, for various and important Reaſons. For this is their generous and noble Notion, that a Charity given in a Quantity of Money, at once, may enable a Perſon to perform that, which is very likely to prove a Foundation for getting his or her Bread, and, perhaps, their Generation after them. But to proceed to my

Eleventh Example of Charity. — It is one I ſhall make known in the Character of an angelic ſingle Gentlewoman poſſeſſed of about 500 *l.* a Year, living at this Time in the County of *Middleſex*, within a few Miles of *London*, a rare Example of ſuch Charity that I never knew any other of her Fortune come up to; for ſhe was ſo public-ſpirited, and ſo inclined to do Good to many in the Country about her, that ſhe ſent for the Officers of the Pariſh, and committed to their Care and Inſpection a conſiderable Sum of Money to be diſtributed by them to the moſt neceſſitous Poor in the ſevereſt Seaſon of the Year. But theſe Officers did not anſwer her Deſign in giving away her Bounty-Money in ſo right a Manner as ſhe wiſhed, and therefore ſhe took this Method afterwards to beſtow it better. As ſhe lived on the Spot, ſhe ordered her Woman to go among Families

Families in the Neighbourhood, and there ſee and make the beſt Enquiry ſhe could, who were the moſt induſtrious, and yet moſt penurious Perſons. When this was done, ſhe directly, by the ſame Woman, ſent either Cloaths, Medicines, or Money to their Relief; but, of the many and great Alms ſhe thus gives, I ſhall only mention this one: — A Man, who is a Day-Labourer to Farmers, having a Wife, and one Child, big with another when ſhe was ſeized with an Ague, which in Time brought on a Jaundice, ſo as to render this Woman a miſerable Object. In this Condition ſhe lay, and muſt conſequently have periſhed, had not this Charitable Gentlewoman ſignaliſed her Goodneſs in a moſt extraordinary Manner, which ſhe did with a Witneſs; for ſhe frequently ſent her Cordials and Wines, ſupplied her with a Nurſe, gave her a new Gown, and other Apparel, and, at laſt, paid half a Year's Rent for them, that they were unable to have done, by Means of the great Charge the Man before had been at on account of his ſick Wife, who, by theſe Helps, recovered, and they are in a fair Way to provide for their two Children by their own Labour hereafter. This Caſe I am ſo well apprized of, that I affirm it be an abſolute true one, as it happened in the Year 1742; a Caſe ſo uncommon, that I cannot forbear adding, it is uſual for this heavenly Woman to ſend for thoſe to her Houſe, after ſhe hath delivered them out of their Diſtreſs, and there with Delight ſee them enjoy a plentiful Dinner, ſome at her own Table, and others elſewhere. In ſhort, if Perſons of Ability would imitate ſuch Charity as this, how happy would they make the World! The Poor would not be ruined by Apothecaries Bills; Pariſhes would be eaſed of chargeable ſick Families, and the villainous Poor would be afraid to offend, leſt their Character take off their Hopes of being relieved in Time of Need by ſuch a good Friend;

the Neighbourhood has juſt Reaſon to put up their daily Prayers for the Continuance of the Health and Proſperity of ſo worthy a Perſon, who does all this out of pure Charity, without any Tie of Conſanguinity.

A Twelfth Example — is from our *Northampton Mercury* of the 14th of *March* 1742, where it gives an Account of *John Duncomb*, Eſq; who died at his Houſe near *Shavington* in *Shropſhire*, laſt Week, a Gentleman of a very large Eſtate, which he daily ſpent in Acts of Hoſpitality and Charity: The Rich have loſt an agreeable Companion, and the Poor a conſtant and generous Benefactor. Now, to conclude this Subject of *Charity*, I ſhall briefly touch on ſeveral others that occurred to my Knowledge: The firſt is, the good Miniſter who lives between *Ayleſbury* and *Uxbridge*, that puts to School about ſeventy ſmall Children at his own Charge, and finds them with Bibles, Prayer-Books, and others, beſides giving at every *Chriſtmas* a Peck Loaf, and Beef, to every poor Houſe-keeper.— The bigger Sort of Children are alſo put to School out of the ſame Pariſh and Adjacency, by a moſt noble worthy Perſon at his own Charge, to the Number of near Fourſcore. The excellent Charity likewiſe of the *Chews* Family deſerves Encomiums of Praiſe, for the vaſt Service it is of to the poor Pariſh of *Dunſtable*, where they have built a fine School and Alms-houſes, maintain forty Boys always in Learning and Cloaths, four of which are every Year put Apprentice, with eight Pounds, and allowed the ſame Sum when out of their Time, and in their Room four are always taken in; if there are none in this, they take them from the next Pariſh. The laſt Charity I ſhall here mention is that of a Widow Gentlewoman at *Thames-Ditton*, in *Surry*, who, out of about fifty Pounds a Year Income, altho' ſhe had three Children, gave away many fine

Cordial

Cordial Medicines of her own Preparing to the poorest Poor, who were unable to buy them; and so efficacious were these, that, if a Person did not mend by their Help, their Recovery was commonly despaired of. But, if I finish my *Country Housewife* Treatise, that I have begun in Opposition to Mr. *Bradley*'s two, which are filled up with little else but Cookery-Receipts, more fit for a Nobleman's Kitchen than a Farmer's, I shall, enlarge upon this Subject in comparing the former good with the present ill Uses that too many employ their Money and Time in.

CHAP. XXIII.

Of Improvements in Husbandry.

The Copy of a Letter to the Author concerning Improving Land in Yorkshire.

SIR,

'AS you are so good as to give Leave to those 'who apprehend they want your Advice to 'apply to you, I therefore take this Liberty.

'About nine Years ago I inclosed about four 'hundred Acres of Arable Land at ——— in '*Yorkshire*.

'In that four hundred Acres is (as is common) a 'great Variety of Soils, some gravelly, some stiff 'Clay, some sandy, and in the same Close frequently one Part Clay, and another Part dead Sand: 'Several particular Parts were over-run with Furz, 'there called *Whins*, which three or four Years 'ago were digged and plowed, and two or three 'Crops of Corn taken off, but begin again to appear.

'My old Swarth lets at twenty Shillings per Acre, in what Part soever of the four hundred Acres 'it lies, which I take to be an Indication of the 'Goodness the Soil in general is of; and yet one 'Piece with another, of that which was Arable, lets 'now not for more than five or six Shillings an Acre.

'I have now four and twenty Acres of Wheat 'growing I want to know the Value of, being 'willing five or six Months hence to sell it standing, 'and then the Value, not before, can be judged of. 'In a Piece of old Swarth now plowed, to lay it 'strait and even, about eighteen Acres early this 'Season were sown with Oats, with Hopes to have 'those early enough off the Ground, to sow immediately after with Rape. As I did not plow that 'Piece of Ground for Lucre, a Crop or two, but 'to lay it as should be for Grass (for, as it laid, it 'bore neither the Quantity nor Quality of Grass, 'as it would do, when laid down right) after the 'Rapes are off, I would use the proper Method to 'get it to swarth as soon as possible.

'I want to be informed of the Value of each 'Piece of Ground, and how to make such Agreements with Tenants, as to oblige them to improve my Land; which certainly has not been 'done by some Mismanagement, or, in nine 'Years Time, it must have been more improved.

'On Inclosing, every Division or Close was 'ditched and Quick-wood set, which in many 'Places I doubt thrives not, as might in that long 'Space of Time be expected; which I doubt comes 'by ill Management of different Kinds, and non-'pruning, or not doing it right: And where 'Quick died, more should be set in its Place; but, 'instead of that, I fear they thrust in dead Furz to 'fill up the Gaps, which kills any Quick that 'may remain under it, and others contiguous there-'to.

'A vast

'A vast Number of Posts and Rails were set to 'defend the Quick: Now, doubtless, the greatest 'Part by this Time needs no Fence, and I could 'use the Posts and Rails in other Matters; and, 'if they stand in their first Position longer than 'Need, Tenants will be apt to burn them.

'These Matters, Sir, I wanted a Person of 'your Skill and Honesty, with several others that 'are to be viewed upon the Spot, to view and give 'me your Judgment of.

'To go on Purpose would be a Charge I can 'apprehend too large; but if it should happen in 'your Travels this Summer, and you go within 'twenty or thirty Miles of it, you might take it 'in your Way, which is the Reason I mention 'where it is. But, as there is Ten to One Odds in 'the Case, I shall be in — at — in *Bedfordshire*, 'where I think to reside most Part of the Summer, 'there I should be vastly glad to see you. It may 'be of Use to me, though you have not seen the 'Land at —, for something, without that, you will 'be able to satisfy me about. In the mean Time I 'beg you will write me two Lines by Return of the 'Post, lest I should not have the Opportunity of 'seeing you there, and be pleased to tell me, whe-'ther you think it probable, that after the Crop of 'Oats I can have Time to sow Rape; or that you 'think it too late then to sow Rape; for, if it were 'possible, I would sow Rape: But, if you think it 'will be too late for Rape, What do you think 'I ought to do with the Ground, whether to take, 'as soon as the Oats are off the Ground, Measures 'how to get a Crop of Turneps; and, when they 'are off, to have the Land well plowed into a fine 'Tilth, and next Spring to sow it with Barley and 'Grass-seed, and to be laid down for Swarth to be 'plowed no more? But, in Case you think it will 'not be too late to sow Rape after Oats are off,

'whether

'whether I might in that Caſe have the Ground 'made a fine Tilth, in order to get it fit to take 'Graſs-ſeeds for a Swarth for ever; for which 'Purpoſe, to ſow it with Rape and Graſs-ſeed, if 'Rapes are proper to ſow Graſs-ſeeds amongſt, 'which you know, for I doubt of it: I only pro-'poſe it, and beg your Thoughts, for I am not 'willing to have it plowed ſo much as one Seaſon 'more than needful, having a Mind, as ſoon as 'poſſible, to have it to Graſs again.

'To this therefore I beg an immediate Anſwer.

'And as to the reſt, I deſire your Thoughts, if you 'think you may have an Opportunity of going to '*Yorkſhire*; and, if I may hope your Buſineſs will 'call you to *Bedfordſhire* this Summer, that I may 'ſee you at ——

'I have your moſt uſeful Books to *October* in-'cluſive, and deſign to take in what more come 'out.

'You ſay a dry *March*, a wet *April*, and a dry '*May* make Plenty, according to which, having 'had ſuch, I hope for a good Crop of Wheat and 'Oats; and, my Oats being, uncommonly ſown, 'will be early off, eſpecially if a rich new Soil, never 'before plowed, may puſh it on to an early Ripe-'neſs. I aſk Pardon for troubling you with ſo 'long a Letter, which, by one uſed to the Subject, 'would have been better and ſhorter expreſſed; 'but, as I am not, I hope you will excuſe it.

I am, Sir, your very humble Servant.

'If you happen to go to *Yorkſhire* about *Mid-'ſummer*, I have, beſides what is above, about 'two Hundred a Year, which I ſhall in this 'Caſe beg your Thoughts of.

The Author's Anſwer.

SIR,

'AS I hope for the Honour of ſeeing you this 'Summer, I ſhall here anſwer only two of 'your Articles, *viz.* that Part of your Land which 'was dug and plowed to clear it of the Furz, and 'get Crops of Corn in their Room, was a true 'Piece of good Huſbandry; for it muſt be a moſt 'wretched Soil indeed, that will not pay better under 'Grain or Graſs, than under Furz. And tho' they 'may after ſome Time begin to appear again; yet, 'if the ſame Land is kept conſtantly under the 'Plough, they will be kept under: That is, if 'the Earth is ſowed two Years together with Corn, 'and the third or fallow Year be employed in on-'ly plowing with a Fin or Wing of Iron fixed near 'the Point of the Share, it will cut in two moſt of 'any new Shoots that may ſpring up from the old 'Furz-roots, make them bleed, or run out their 'Sap, and, in Time, totally kill them: There-'fore ſuch Furz-Land, ſo ſtocked up, ſhould have 'no Clover nor natural Graſs ſown to lie on it, for 'then the Furz would have an Opportunity to grow 'again.

'The eighteen Acres of new broken up Ground, 'you have ſown with Oats, may poſſibly be fit to 'ſow with Rape-ſeed on only one Plowing, that 'ſhould be given the ſame Ground immediately 'after the Oats are off; but the Succeſs depends 'upon good Management: That is, the Ground 'ſhould be plowed well, and the Seed ſown by a 'ſkillful Hand; then, juſt as the Rapes begin 'to appear, there ſhould be an Application of 'ſomething to ſecure the new ſprouting Rapes from 'the Slug, which in a wet Seaſon they ſeldom fail 'to deſtroy, and that whole Fields in a few Days, 'while the Rapes are in the Infant-growth of the

'ſecond

'second and third Leaf. The Remedy for this I can 'inform you of, which is of such Importance to pre- 'vent the Damage of Flies and Slugs to young Tur- 'neps and Rapes, that some had better give me 'twenty Guineas than be without the Knowledge 'of such a cheap and sure Antidote. Then as the 'Ground is fresh, and in good Heart, you hardly 'can fail of a full Crop of Rapes; but Sowing 'Grass-seeds among them, to create a new Swarth, 'would be attempting a Thing contrary to the 'Art of good Husbandry; for the great Cover of 'the Rape-heads would certainly prevent the Ve- 'getation of the Grass-seed, at least, its After- 'growth. But, as you are more than ordinary de- 'sirous to get the same Oat-ground into a Swarth 'with all Expedition, you would do well to have it 'plowed directly after Harvest, and again in *No- 'vember*, and the last Time the Beginning of '*March*, when it should be sown with Barley, 'and a Sort of Grass-seed that I can tell you of, 'which will be a full Twenty Shilling Acre Crop 'next Year, and so on for ever with good Manage- 'ments.' — There will be Copies of several other curious Letters in next Month, on Variety of Sub- jects.

FINIS.